RG COLORADO

RG Colorado
Owner’s Handbook

GM Holden Ltd, ABN 84 006 893 232 (hereinafter Holden)

Change of name, address or ownership

In the event of a Safety Recall, or for various reasons, Holden may need to contact you as the owner of this vehicle.

If you have recently changed your address, or name, or purchased this vehicle second-hand, please help us to help you by taking a few minutes to fill in and mail the forms at the beginning of the Service/warranty booklet.

For information about GM Holden's privacy policy or to update owner details online, please visit Holden's website at www.holden.com.au

Note Please refer to the inside front cover of the Service/warranty booklet for the Vehicle Identification Certificate.

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Introduction 2
In brief 4
Keys, doors, and windows 16
Seats, restraints 28
Storage 45
Instruments and controls 53
Lighting 75
Infotainment system 81
Climate control 108
Driving and operating 115
Vehicle care 145
Service and maintenance 186
Technical data 188
Customer information 193
Index 195

Introduction

We thank you for choosing Holden and want to assure you of our continuing interest in your driving pleasure and satisfaction.

This handbook applies to the current Colorado model. Therefore, due to different models and options, you may find reference in this Handbook to some equipment not fitted to your own vehicle.

Please note that all information, illustrations and specifications in this Handbook are based on the latest production information available at the time of printing. Holden reserves the right to make changes at any time without notice and without incurring any obligation.

Introduction

Your vehicle is a designed combination of advanced technology, safety, environmental friendliness and economy.

This Owner's Handbook provides you with all the necessary information to enable you to drive your vehicle safely and efficiently.

Make sure your passengers are aware of the possible risk of accident and injury which may result from improper use of the vehicle.

Using this manual

- The In brief section will give you an initial overview.
- The table of contents at the beginning of this manual and within each chapter shows where the information is located.
- The index will enable you to search for specific information.
- Directional data, e.g. left or right, or front or back, always relate to the direction of travel.
- Depending on the model variant, integrated special equipment and accessories, the scope of equipment of your vehicle can differ from the descriptions in this Owner's Handbook.
- The *Bluetooth*® word mark and logo are registered trademarks and are owned by the Bluetooth SIG, Inc.
- iPod® is a registered trademark of Apple Inc.
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Danger, warnings and cautions

⚠Danger

Text marked ⚠ **Danger** provides information on risk of fatal injury. Disregarding this information may endanger life.

⚠Warning

Text marked ⚠ **Warning** provides information on risk of accident or injury. Disregarding this information may lead to injury.

Caution

Text marked **Caution** provides information on possible damage to the vehicle. Disregarding this information may lead to vehicle damage.

In brief

Initial drive information

Locking/unlocking the vehicle

Remote keyless entry

The key operates all doors and the ignition.

- Press once to unlock the driver's door.
- Press twice to unlock all other doors.
- Press to lock the doors.

Central locking system, see page 18.

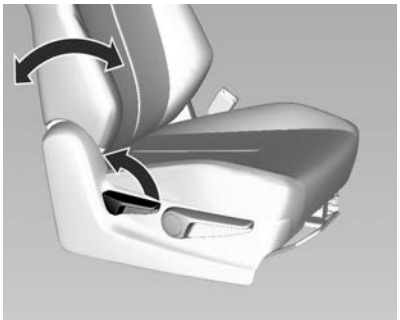
Seat adjustment

Seat positioning

1. Move the seat forwards or backwards by lifting the handle at the front and sliding the seat.
2. Release the handle to engage the latch.

Seat adjustment, see page 29.

Seat backrests



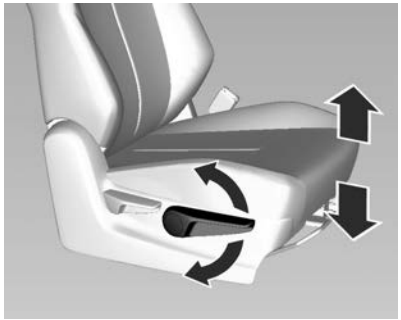
1. Recline the seatback by pulling the lever.
2. Adjust the angle and release the lever.
3. Allow the seat to engage.

Note
Do not lean on the seat when adjusting.

Seat adjustment, see page 29.

Seat height

The vehicle may have seat height adjustment.



- To lower the seat cushion, push the lever down several times.
- To raise the seat cushion, pull the lever up several times.

Seats adjustment, see page 29.

Power seat adjustment

Seat positioning

The vehicle may have power seat adjustment.

- Move the seat forwards or backwards by sliding the switch.

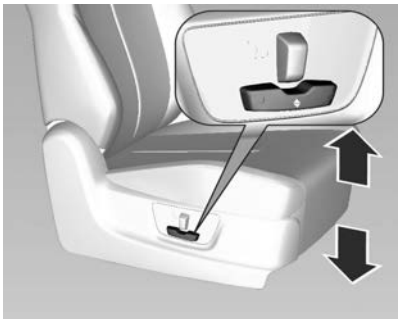
Seat adjustment, see page 29.

Seat backrests

- Recline the seatback by sliding the switch forwards or rearwards.

Seat adjustment, see page 29.

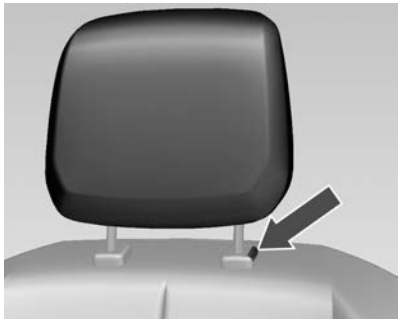
Seat height



- To lower the seat cushion, push the switch downwards.
- To raise the seat cushion, pull the switch upwards.

Seats adjustment, see page 29.

Head restraint adjustment



- To raise the head restraint, pull the head restraint upwards.
- To lower the head restraint, press the button and push the head restraint downwards.

Head restraints, see page 28.

Seat belts

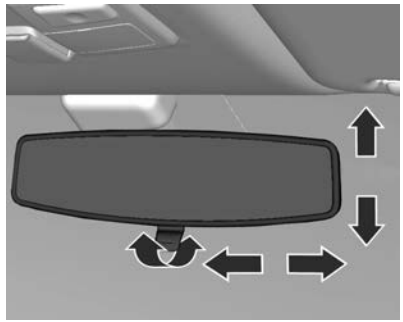
1. Withdraw the belt from the reel.
2. Pull the metal tongue across your body into the buckle, until it clicks into place.
3. Tension the lap belt regularly while driving by tugging the shoulder belt.

Seat belts, see page 33.

Airbag system, see page 37.

Mirror adjustment

Interior mirrors



- To reduce headlamp glare from following vehicles, pull the lever towards the rear of the vehicle.

Interior mirrors, see page 24.

Exterior mirrors

The vehicle may have power mirrors.

L: Left side mirror selected

R: Right side mirror selected

●: No mirrors selected

To adjust an exterior mirror:

1. Push the switch to **L** or **R**.
2. Press the directional switch to adjust the angle of the mirror.

Exterior mirrors, see page 23.

Steering wheel adjustment

The vehicle may have steering wheel adjustment.

1. To unlock, move the lever down.
2. Adjust the steering wheel.
3. To lock, move the lever up.
4. Ensure the steering wheel is locked in position before driving.

Steering wheel adjustment, see page 53.

Ignition positions, see page 118.

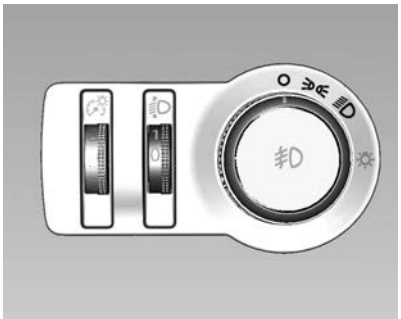
Airbag system, see page 37.

Instrument panel overview

1 Exterior lamp control 75
2 Side air vents 114
3 Steering wheel controls (cruise control) 133
4 Turn signals, headlamp flash, low beam and high beam 75
5 Warning light, gauges and indicators 57
6 Horn 54
Driver's airbag 37
7 Driver Information Centre (DIC) 66
8 Steering wheel controls (audio) 53
9 Windscreen wiper, windscreen washer system 54
10 Central air vents 114
11 Infotainment system display 82
12 Hazard warning flashers 76
13 Instrument panel storage compartment 45
14 Infotainment system controls 82
15 Passenger airbag 37
16 Cup holder and storage 47
17 Glove box 47
Instrument panel storage 45
18 Shift lever, manual transmission .. 124
19 Power outlets 56
20 Traction control system off 131
Electronic stability control off 132
21 Shift lever, automatic transmission 121

22 Steering wheel adjustment 53
23 Clutch pedal..... 124
24 Brake pedal 129
25 Accelerator pedal 115
26 Bonnet release lever 147
27 Instrument panel fuse box (behind storage compartment) 167
28 Fuel tank door release lever 137
29 Ignition switch/lock..... 118
30 Climate control..... 108

Exterior lighting



O (OFF): Rotate to turn all lamps and lights off.

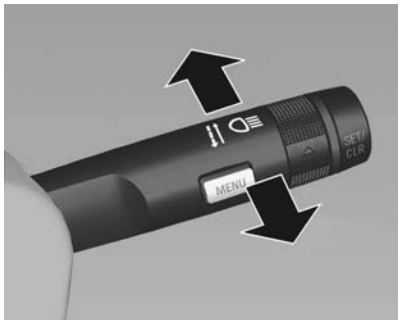
(Park lamps): Turns on the park lamps, number plate lamps and instrument panel lights.

D (Headlamps): Turns on the headlamps and all park lamps.

D (Fog lamps): Press to turn the front fog lamps on or off, when the park lamps or headlamps are on.

Exterior lighting, see page 75.

High/low beam



- To flash the headlamps, pull the lever.
- To switch from low to high beam, push the lever.
- To switch to low beam, push again or pull the lever.

Exterior lighting, see page 75.

Hazard warning flashers

- Press ⚠ to turn the hazard warning flasher on or off, when the ignition is in any position.

Exterior lighting, see page 75.

Turn and lane-change signals

- Push the lever in the direction the steering wheel is turned.
- A green arrow on the instrument panel flashes when the lamps are in operation.

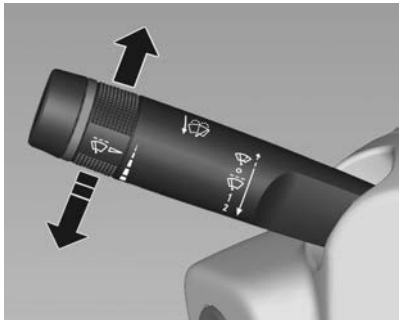
Exterior lighting, see page 75.

Horn

Press .

Washer and wiper systems

Windscreen wiper



O: Off

: Intermittent operation

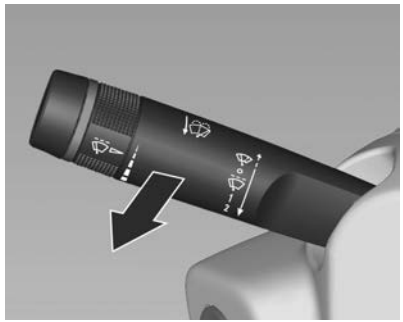
1: Continuous wipe, slow speed

2: Continuous wipe, fast speed

For a single wipe when the windscreen wipers are off, lightly move the lever up and release it.

Windscreen wiper/washer, see page 54.

Windscreen washer



- Pull the lever rearwards to wash the windscreen.

  Washer fluid is sprayed onto the windscreen and the wipers operate.

Windscreen wiper/washer, see page 54.

Washer fluid, see page 154.

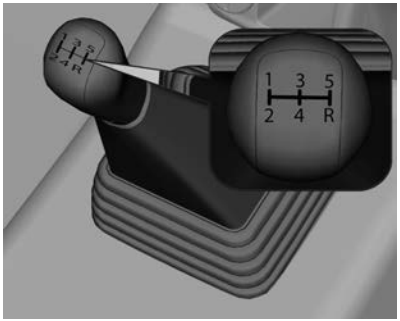
Climate control

The climate control panel is located in the centre of the instrument panel.

Climate control, see page 108.

Transmission

Manual transmission



- When shifting from one gear to another, push the clutch pedal to the floor.
- Do not engage reverse gear while the vehicle is still moving.
- Pause between pressing the clutch pedal and moving into reverse gear.

Manual transmission, see page 124.

Automatic transmission

P: Park

R: Reverse

N: Neutral

D: Drive

The shift lever can only be moved out of **P** when the ignition is on and the brake pedal is applied.

To engage **P** or **R**, push the release button on the front of the shift lever.

Manual mode: Move the shift lever to position **D**, then push to the left.

+ : higher gear

– : lower gear

Automatic transmission, see page 121.

Four-Wheel Drive, see page 125.

Starting off

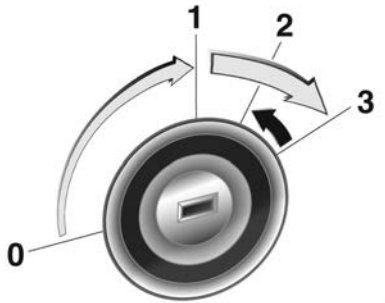
Check before starting

- Check that windows, mirrors and lamps are clean.
- Visually check tyre inflation. Check the tyre pressures weekly.
- Ensure that all doors are closed and secured.
- Position your seat for comfortable driving.
- Adjust rear view mirrors.
- Fasten seat belts.
- Check that the warning indicators illuminate when turning the ignition on.

Warning lights, gauges and indicators, see page 57.

Driving and operating, see page 115.

Starting the engine



⚠Warning

Do not turn the engine off while the vehicle is moving as there will not be any power assist for brakes or steering.

Never remove the key while the vehicle is moving, as this will lock the steering.

0: (LOCK) The key can only be inserted and removed from this position.

1: (ACC) When the key is in this position, the audio system operates.

2: (ON) Turn the key to this position for preheating, until ϖ goes out.

When the key is in this position, the engine is ready to start and all electrical systems are active.

Do not leave the switch in this position for a long time, unless the engine is running, otherwise the vehicle's battery will discharge.

3: (START) Turn the key to this position and release when the engine is running.

Ignition positions, see page 118.

Manual transmission, see page 124.

Automatic transmission, see page 121.

Parking

1. Apply the park brake.
2. Automatic transmission: Select position **P**.

   Manual transmission: If facing uphill or on flat ground, select 1st gear. If facing downhill, select reverse gear.
3. Shut all windows.
4. Keep the engine running for about 1 to 2 minutes to protect the turbocharger.

   Turn the ignition off and remove the key.
5. Press on the key to lock all doors.

Driving and operating, see page 115.

Keys, doors and windows

Keys and locks 16
Doors 19
Vehicle security 21
Exterior mirrors 23
Interior mirrors 24
Windows 25

Keys and locks

Keys

The key operates all doors and the ignition.

- Press to unlock the driver's door.
- Press twice to unlock all other doors.
  The hazard lamps flash twice.
- Press to lock the doors.
  The hazard lamps flash once.

See Central locking system on page 18.

See Tailgate on page 21.

Foldaway key blade

1. Press button to extend the key blade.
2. To retract the key blade, press the button and fold the blade into the key.

About the keys

- The remote control has a range of up to 20 metres.
- The range depends on the charge of the key battery, on ambient conditions, the key's location and the area between them.
- Take care that no button is pressed unintentionally, especially when the vehicle is out of sight.
- Protect from moisture and high temperatures.

The key buttons may not work if:

- More than 20 metres from the vehicle.
- Battery voltage is too low. See Battery replacement on page 17.
- The key buttons are operated repeatedly while not in range of the vehicle.
- The central locking system is operated at frequent intervals.
- The power supply is interrupted for a short time.
- The vehicle is parked near strong radio activity.

Replacement keys

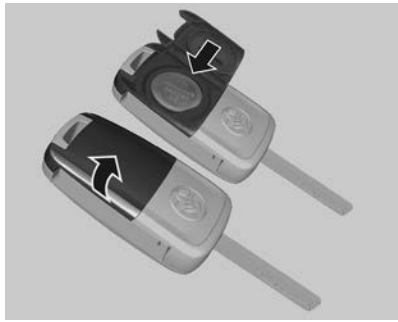
If a key is lost, a replacement can be ordered through any Holden Dealer by quoting the key code number. The number is printed on a detachable tag supplied with the key.

Radio remote control

Battery replacement

As soon as the range of the remote control reduces, replace the battery:

Replace battery in remote key is also displayed on the instrument panel when the battery requires replacing.



Use CR2032 (or equivalent) battery.

1. Open the cover.
2. Remove the used battery.

3. Install the new battery.

   Place the negative side (-) down towards the base.
4. Close the cover.
5. Check the key operation.

Note

- Batteries do not belong in household waste. Dispose of at an appropriate recycling collection point.
- Avoid dropping the transmitter.
- Do not place heavy objects on the transmitter.
- Keep the transmitter away from water and direct sunlight.

  If the transmitter gets wet, wipe it with a soft cloth.

Caution
Avoid touching the flat surfaces of the battery, the circuit board and other components inside the remote control with bare fingers. Handling will shorten battery life.

Central locking system

Doors may be locked and unlocked by pressing buttons on:

- The driver's door
- The key from inside or outside the vehicle

Note

- The driver's door must be closed for the driver's door to lock.
- Pulling on an interior door handle will not unlock a door unless an unlock button has been pressed.

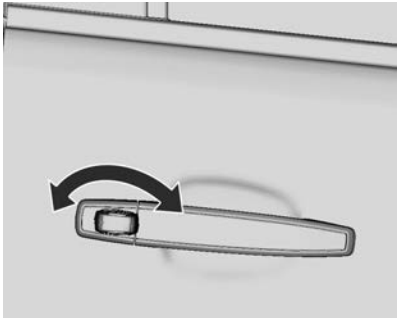
Central locking button

Locks and unlocks all doors.

- To lock, press on the front section of the switch.
- To unlock, press on the rear section of the switch.

Doors

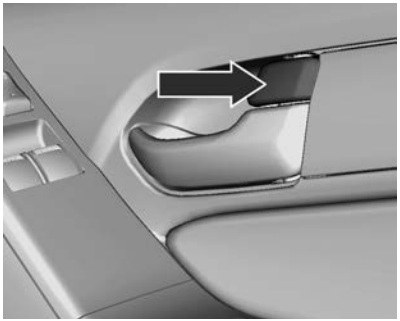
Manual door locks



- Insert the key into the door lock.
- Turn the key clockwise to lock.
- Turn the key anticlockwise to unlock the driver's door.

Note
Tap the key slot or heat the key if the door does not open in cold weather.

Door lock snibs



- To lock any door from the inside, push the door lock snib so it is flush with the door handle.
- To unlock any door from the inside, pull the door lock snib outwards.
- The driver's door lock snib does not operate when the door is open.

Note
Do not operate the switches constantly.

Child security rear door locks

The vehicle may have child security rear door locks.

⚠Warning

Use the child security door locks whenever children are occupying the rear seats.

The child security rear door locks prevent the rear doors from being opened from the inside.

Rotate the switch using a key or suitable screwdriver.

To activate:

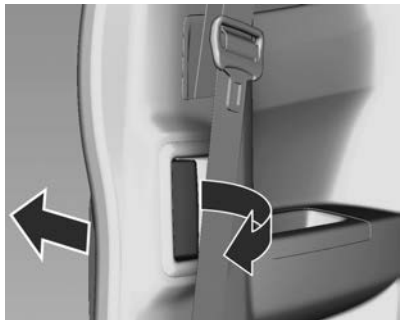
- Rotate the switch in a clockwise direction.

To open a door when the child security rear door lock is activated:

- Open the door from the outside.

Rear doors

Space cab



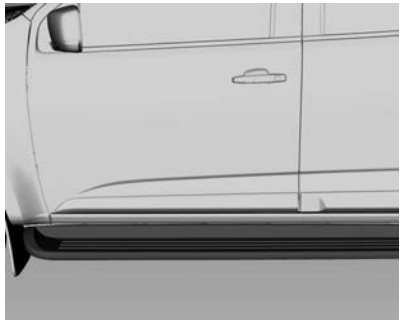
To open a rear door:

1. Open the front door.
2. Open the rear door by using the handle located on the front edge of the rear door panel.

Note
When closing doors, close the rear doors before closing the front doors.

Side steps

The vehicle may have side steps.

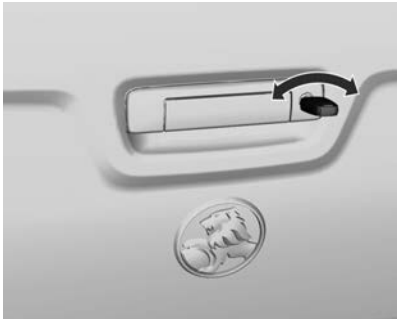


The side steps provide an extra foothold for accessing the front or rear doors.

Tailgate

Locking and unlocking

The vehicle may have a tailgate lock.



- To lock, turn the key anticlockwise until the key is in the vertical position.
- To unlock, turn the key clockwise until the key is in the horizontal position.

  Pull the handle upwards to open.
- The key can be removed from either the locked or unlocked positions.

Vehicle security

Anti-theft alarm system

The system monitors the doors, ignition and the bonnet.

The system is activated:

- Thirty seconds after locking the vehicle.
- Alternatively, by pressing a second time.

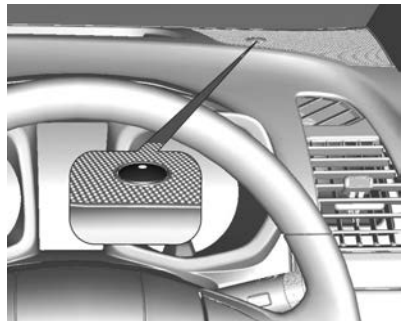
The system is deactivated by:

- Pressing on the key.

Note

- If the driver's door is opened manually, while the alarm is activated, the key needs to be inserted into the ignition within 10 seconds to avoid triggering the alarm. During the 10 seconds, the horn sounds and the hazard warning flashers activate.
- When the alarm is triggered, the horn sounds and the hazard warning flashers activate for 30 seconds.
- If the alarm was triggered during alarm activation, the horn will sound three times and the hazard warning flashers will activate three times.

Status LED



The status LED is located on top of the instrument panel.

During the first 30 seconds of system activation:

- LED illuminates (test, arming delay).
- LED flashes quickly (doors or bonnet are not completely closed, or there is a system fault).

When the system is armed:

- LED flashes slowly.

If a fault occurs, contact a Holden Dealer.

Immobiliser

The immobiliser prevents unauthorised engine starting.

- If an invalid key is inserted into the ignition switch/lock, an indicator on the instrument panel will flash.

  The vehicle will not start.
- The engine is automatically immobilised after the key is turned to LOCK and has been removed from the ignition switch/lock.
- Only valid ignition keys can be used to start the engine.
- If flashes or illuminates when the ignition is on, there is a fault in the system. The engine cannot be started. Turn the ignition off and on again.

  If the control indicator continues to flash or illuminate, try to start the engine using the spare key.

  Have the vehicle checked by a Holden Dealer.

Note
The immobiliser does not lock the doors.

See Vehicle security on page 21.

See Control indicators on page 60.

Exterior mirrors

Convex mirror

The convex exterior mirrors provide a wider view of the road and traffic.

⚠Warning

Objects seen in these mirrors are closer than they appear.

Manual mirrors

The vehicle may have manual mirrors.

- Press the edges to adjust the angle of the mirror.

Power mirrors

The vehicle may have power mirrors.

Adjust the driver or passenger side mirror.

L: Left side mirror selected

R: Right side mirror selected

●: No mirrors selected

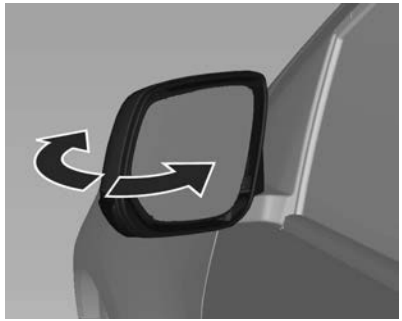
To adjust an exterior mirror:

1. Push the switch to **L** or **R**.
2. Press the directional switch to adjust the angle of the mirror.

Folding mirrors

Manual folding

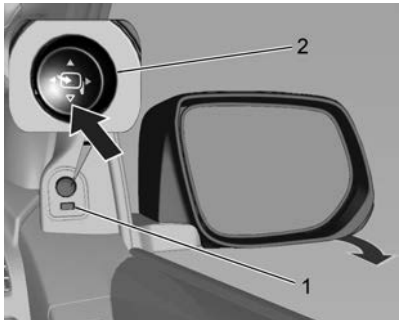
The vehicle may have manual folding mirrors.



When the vehicle is parked, the mirrors may be folded flat against the side of the vehicle.

Electric folding

The vehicle may have electric folding mirrors.



1. Push the switch (1) to the central position ●.
2. Push the directional switch (2) downwards.

   Both exterior mirrors fold inwards.
3. Push the directional switch (2) down again.

   Both exterior mirrors return to their original position.

Note

If one mirror is manually extended or folded, by pressing the directional switch (2) down, the other mirror will be extended or folded.

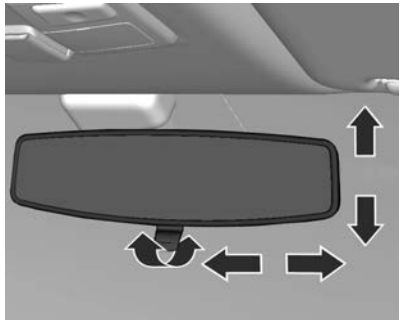
⚠Warning

Always extend mirrors outwards for driving to increase visibility.

Do not drive while either exterior mirror is folded against the vehicle.

Interior mirrors

Rear view mirror



Adjust the rear view mirror to provide a clear view behind the vehicle.

To reduce headlamp glare from following vehicles, pull the lever towards the rear of the vehicle.

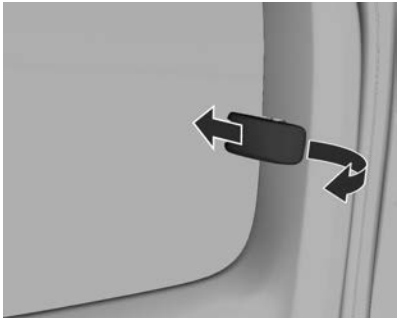
Note

The rear view clarity is reduced when the mirror is set to the anti-glare position.

Return the lever back to its original position as soon as the glare has disappeared.

Windows

Manual windows



- The vehicle may have a lever to open the rear side windows.
- Push the lever towards the front of the vehicle, then outwards.

Power windows

⚠Warning

Before operating the power windows, check they are free of obstructions and that passengers and pets are not in the proximity of the moving window.

- The power windows can be operated when the ignition is turned on.
- The switches can be operated for up to 10 minutes, after turning the ignition off.
- After turning the ignition off, window operation is disabled when either the driver or passenger door is opened.

Note
If the windows are operated repeatedly, window operation is disabled for some time.

Operation

- To open a window, press the switch down.
- To close a window, pull the switch up.
- The window stops moving up as soon as the button is released.

Auto up/down

The driver's window has an auto up/down function.

- To open the window automatically, press the switch fully down.
- To close the window automatically, pull the switch fully up.
- The window will open or close fully when the switch is released.
- Press or pull the switch to interrupt automatic operation.

Anti-pinch function

If the driver's window encounters any resistance during auto closing, it will stop immediately and open again.

Safety override function

If a window becomes difficult to close, possibly due to frost:

1. Pull the switch upwards and hold.
   The window moves up without the anti-pinch function.
2. Release the switch to stop window movement.
3. Operate the switch once more in the same direction, to continue closing.

Initialising the power windows

If the driver's window cannot be closed automatically, e.g. after disconnecting the battery, operate the window as follows:

1. Turn the ignition on.
2. Press the switch down for 2 seconds to move the window down.
3. Pull the switch up to move the window up and close it completely, holding the switch up for an additional 2 seconds after the window stops.

Child safety switch

Press to activate/deactivate the front passenger and rear door power window switches.

Heated rear window

The vehicle may have a heated rear window. See Climate control on page 108.

Sun visors

- The sun visors can be folded down or folded outwards over the side window, to prevent glare.
- If the vehicle has a mirror, close the cover when driving.

⚠Warning

Do not place the sun visor in such a position that it reduces visibility of the roadway, traffic or other objects.

Assist grips

The vehicle may have assist grips.

- Assist grips are located above the doors to assist passengers getting in and out of the vehicle.
- The assist grips above each rear door may include a coat hook.

Seats, restraints

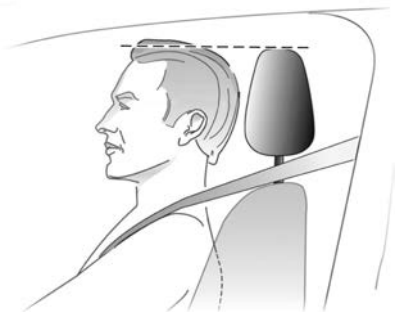
Head restraints 28
Front seats 29
Rear seats 32
Seat belts 33
Airbag system 37
Child restraints 40

Head restraints

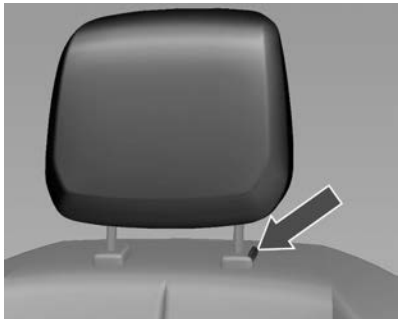
⚠Warning

This safety feature is not intended to rest the head upon. It is solely for the reduction of whiplash neck movement in an accident involving your vehicle.

The centre of the head restraint should be at eye level, never at neck level.



Height adjustment



- Pull the head restraint up.
- Press the locking button and push the head restraint down.

Front seats

Seat position

⚠Warning

To avoid reducing the effectiveness of seat belts, seatbacks should only be upright or at most semi-reclined when the vehicle is moving.

- Sit centrally in the seat.
- Use the backrest and cushion for support.
- Adjust the seat so that your legs are slightly angled when against the pedals.
- Adjust the backrest angle to easily reach the steering wheel with arms slightly bent. See Steering wheel adjustment on page 53.
- Maintain contact between shoulders and the backrest when turning the steering wheel.
- Adjust the head restraint. See Head restraints on page 28.
- Slide the passenger seat as far back as possible.

Seat adjustment

⚠Danger

Do not sit nearer than 25 cm from the steering wheel, to allow safe airbag deployment.

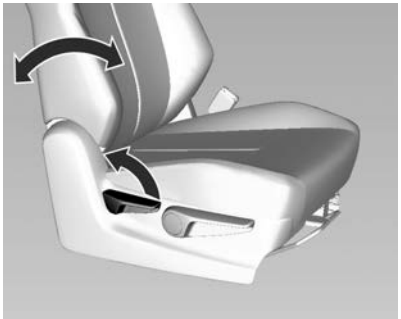
⚠Warning

Do not adjust the driver's seat when the vehicle is moving as the seat could move suddenly causing the driver to lose control.

Seat positioning

1. Move the seat forwards or backwards by lifting the handle at the front and sliding the seat.
2. Release the handle to engage the latch.

Seat backrests

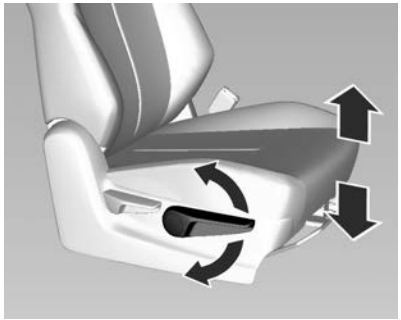


1. Recline the seatback by pulling the lever.
2. Adjust the angle and release the lever.
3. Allow the seat to engage.

Note
Do not lean on the seat when adjusting.

Seat height

The vehicle may have seat height adjustment.



- To lower the seat cushion, push the lever down several times.
- To raise the seat cushion, pull the lever up several times.

Power seat adjustment

Seat positioning

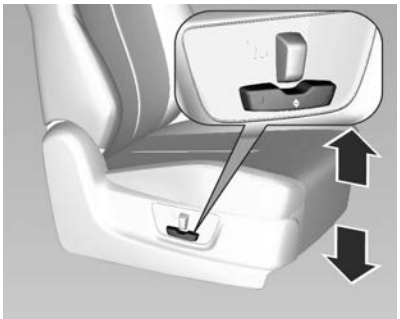
The vehicle may have power seat adjustment.

- Move the seat forwards or backwards by sliding the switch.

Seat backrests

- Recline the seatback by sliding the switch forwards or rearwards.

Seat height



- To lower the seat cushion, push the switch downwards.
- To raise the seat cushion, pull the switch upwards.

Rear seats

Folding down rear seatbacks

The vehicle may have rear seats.

⚠Danger

Ensure the rear seatbacks are securely in place.

Do not adjust the rear seatback while the vehicle is moving. This could cause damage or injuries to the occupants.

Do not allow passengers to sit on the folded seatbacks while the vehicle is in motion. Unrestrained luggage or passengers on a folded seatback could be thrown within or ejected from the vehicle in a sudden stop or accident.

Caution

Do not trap the seat belt when returning the seatback to the upright position.

To fold the rear seatbacks down:

1. Unbuckle the centre seat belt by inserting the ignition key tip into the slot.
2. Allow the belt to retract slowly.

Caution

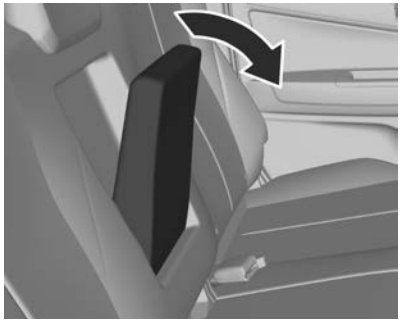
Do not let go of the unbuckled seat belt until it is fully retracted.

3. Crew cab: pull up on either the single centre, or both outboard seatback release straps.
4. Fold the seatback forwards.

To return the seatback to the upright position:

1. Lift the seatback upwards and push firmly back into place to secure.
2. Reconnect and secure the centre seat belt, making sure it is not twisted.

Armrest



Unfold the armrest by pulling downwards from the top.

Seat belts

⚠Warning

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid.

Belts should not be worn with straps twisted.

Each belt assembly must only be used by one occupant. It is dangerous to put a belt around a child being carried on the occupant's lap.

No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

The belts lock during heavy acceleration or deceleration for the safety of the occupants.

Belt force limiters

On front seat three point belts, stress on the body is reduced by the gradual release of the belt during a collision.

Belt tensioners

In the event of a front, side or rear collision of a certain severity, the driver's and/or front passenger's three point seat belts are tightened.

⚠Warning

Incorrect handling (e.g. removal or fitting of belts or belt buckles) can deploy the belt tensioners with risk of injury.

- When the belt tensioners have been deployed, illuminates on the instrument panel. See Seat belt reminders on page 61.
- Deployed belt tensioners must be replaced.
- Belt tensioners are only triggered once.

⚠Warning

Do not attach or install objects that may interfere with the operation of the belt tensioners.

Do not make any modifications to belt tensioner components.

Three point belt

Fitting

The belt should not be twisted. It should lie flat and fit firmly across your hips.

1. Withdraw the belt from the reel.
2. Pull the metal tongue across your body into the buckle, until it clicks into place.
3. Tension the lap belt regularly while driving by tugging the shoulder belt.

Do not place objects such as handbags or mobile phones between the belt and your body.

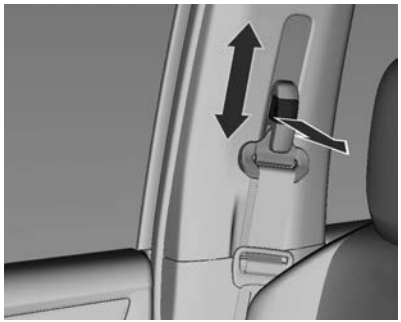
⚠Warning

The belt must not rest against hard or fragile objects in the pockets of your clothing.

Note

If the shoulder portion of a passenger seat belt is pulled out all the way, a locking feature may be engaged. If this happens, let the belt go back all the way and start again.

Height adjustment



1. Pull the belt out slightly.
2. Pull the button outwards.
3. Move up and down as required.
4. Ensure that the anchor clicks into position.

⚠Warning

Do not adjust the belt while driving.

The belt must lie across the shoulder. It must not lie across the throat or upper arm.

Removing

1. Press the red button on the buckle.
2. Allow the belt to retract.
3. Check that it fully retracts without twisting or turning.

Lap belt

The vehicle may have a lap belt on the centre front seat.

The belt should not be twisted. It should lie flat and fit firmly across your hips.

1. If necessary, loosen the belt by pulling through the loop on the metal tongue.
2. Pull the metal tongue across your body into the buckle, until it clicks into place.
3. Tension the belt by tugging on the free end.

Seat belt use during pregnancy

⚠Warning

The lap belt must be positioned as low as possible across the pelvis to prevent pressure on the abdomen.

Seat belts work for everyone, including pregnant women. Like all occupants, they are more likely to be seriously injured if they do not wear a seat belt.

A pregnant woman should wear a three point belt with the lap portion of the belt worn as low as possible below the rounding of their stomach, throughout the pregnancy.

Seat belt care

⚠Warning

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

Replacing seat belts after a crash

⚠Warning

It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Airbag system

When deployed, airbags inflate within milliseconds. They also deflate so quickly that it is often unnoticeable during the collision.

⚠Danger

Do not make any modifications to the airbag system.

The driver should sit back as far as possible while still maintaining control of the vehicle. Sitting too close to the airbag can cause death or serious injury when it inflates.

Always wear a seat belt.

⚠Warning

WARNING – EXTREME HAZARD

Do not use a rearward facing child restraint on a seat protected by an airbag in front of it.

The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.

Remember that it is safest for children to be seated in the rear seats. See Child restraints on page 40.

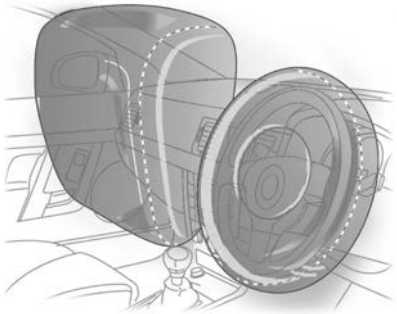
⚠Warning

Airbags are part of the supplemental restraint system (SRS) as they assist, but do not replace seat belts. Airbags do not deploy in every accident. Various factors dictate whether they deploy including speed, angle of collision and object hit. Airbags are not designed to inflate if the vehicle is hit from the rear or is involved in a rollover. Seat belts must be worn by all passengers whenever the vehicle is moving.

Airbags inflate with great force. If you are too close to an inflating airbag it may cause injury.
Seat belts help keep you in position for airbag inflation in the event of a collision.

See Airbag and belt tensioners light on page 62.

Front airbag system



The front airbag system consists of one airbag in the steering wheel and one in the instrument panel on the passenger side. These are identified by the word **AIRBAG**.

⚠Warning

The horn pad must not be covered with adhesive or any other material.

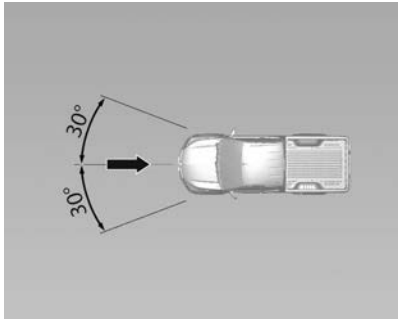
The driver should adjust the seat as far rearward as possible while still maintaining control of the vehicle.

⚠Warning

Do not place any objects on or over the instrument panel or between an airbag and yourself.

Do not hang anything from the sun visor or mirror.

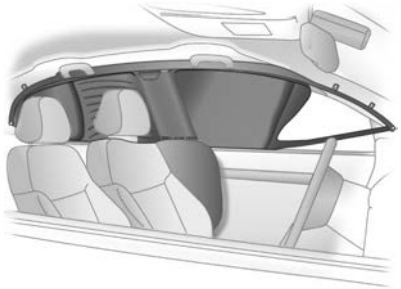
Passengers must not rest their feet on the instrument panel.



Front airbags will inflate in certain severe frontal or near frontal impacts. Front airbags are not designed to inflate if the vehicle is struck from the side, rear or in rollovers. Always wear a seat belt.

Curtain airbag system

- Curtain airbags are stored in the roof on each side of the vehicle.
- They can be identified by the word **AIRBAG** on the roof pillars.



- The curtain airbags deploy in most, but not all severe side impacts.
- The risk of injury to the head in the event of a side impact is considerably reduced.

⚠Warning

Do not position your body or any object (including pillows) in the area in which the airbag inflates.

There must be no objects in the area in which the airbag inflates. Refer to the illustration.

Use the hooks above the doors only to hang up light articles of clothing.

Do not place any objects in the pockets of the hanging items.

Do not hold onto the assist grips (above the doors) while seated in the vehicle.

Do not lean on, or sleep against the front or rear doors. Always sit centrally in the seat.

Always wear a seat belt.

Replacing airbag system parts after a crash

Note
After an accident where airbags have deployed, the systems, associated parts and hardware must be checked and replaced as required.

Seats, associated parts and hardware must also be checked and replaced as required.

The airbag system should also be inspected after an accident if:

- The instrument panel area or steering wheel is scratched, cracked or damaged.
- The front seats and upholstery are damaged.
- The headliner or trim panels are damaged.

It is recommended that this work be carried out by a Holden Dealer or approved repairer.

Child restraints

⚠Warning

WARNING – EXTREME HAZARD

Do not use a rearward facing child restraint on a seat protected by an airbag in front of it.

The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.

Remember that it is safest for children to be seated in the rear seats.

Never carry a child while travelling in the vehicle.

⚠Warning

SPACE CAB

Do not use child restraints on the front and/or rear seats. These vehicles are NOT fitted with child restraint anchorage points.

⚠Warning

SINGLE CAB

Do not use a child restraint on the front passenger seat. These vehicles are NOT fitted with child restraint anchorage points.

⚠Warning

This manual provides you with general information concerning child restraints only.

The driver is required by law to ensure that passengers are suitably restrained. In most States and Territories of Australia and New Zealand, specific laws may exist which require children to be seated in approved child restraints.

Holden strongly recommends that you refer to your specific State or Territory regulations to determine which child restraint is suitable for your child.

⚠Warning

Always ensure that the seat belt fits firmly around the child restraint.

If a child cannot see out of the window, do not raise him/her by means of an ordinary cushion. It will not stay in place in a collision and the child can slip out of the straps and become entangled.

Child restraint seat belt locking feature (Crew cab)

The rear seat belts have a child restraint locking feature.

When engaged, this feature prevents the seat belt from being loosened without releasing the buckle.

To engage:

1. Clip the metal tongue into the buckle.
2. Pull the shoulder belt all the way out of the retractor to set the lock. When the retractor lock is set, the belt can be tightened but not pulled out of the retractor.
3. To tighten the belt around the installed child seat, push down on the child restraint, pull the shoulder portion of the belt to tighten the lap portion of the belt and feed the shoulder belt back into the retractor.
4. Try to pull the belt out of the retractor to make sure the retractor is locked. If the retractor is not locked, repeat Steps 2 to 4.
5. To remove, press the release button on the buckle and allow the belt to fully retract.

Selecting the right system

Infants

Rearward facing infant capsules are designed so that in the event of a collision, impact forces will be evenly spread over the baby's back, with minimal jarring to the vulnerable head and neck area.

Young children

Forward facing child seats are for use when the child is able to sit and easily hold their head upright.

Booster seats

Booster seats are for when children outgrow a typical forward facing child seat, but are still too small for three point seat belts.

⚠Warning

Always move the passenger seat as far back as it will go before installing a booster seat. This locates the child as far from the passenger airbag as possible.

Remember that it is safest for children to be seated in the rear seats.

Older children

A child should use a normal three point seat belt only when:

- They can sit against the back of the rear seat with knees bent comfortably at the edge of the seat.
- The lap belt rests low and snug across the hips, not across the stomach.
- The sash belt is centred on the shoulder and chest.
- They are able to stay seated like this for the entire trip.

Where to put the restraint

The vehicle may have child restraint anchorage points.

⚠Warning

Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.

Only child restraints that have clips to attach to the vehicle's anchorage fittings are to be used. Earlier types of child restraints may not attach securely to this type of anchor.

Use only Standards Australia and New Zealand approved child restraints and harnesses. Only purchase a child restraint which carries the appropriate Standards Australia sticker of approval.

The child restraint must be attached to the child restraint anchorage points, located behind the rear seat.

Remember, it is safest for children to be seated in the rear seat.

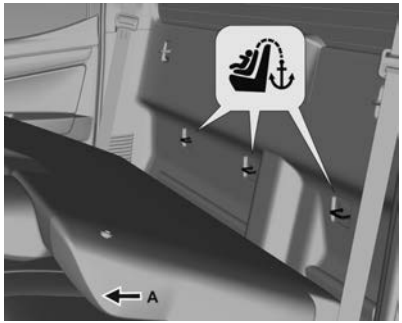
⚠Warning

Do not fit a child restraint to a rear folding jump seat or a seat without a child restraint anchorage point.

Note

If unsure about installing a child restraint, contact an approved restraint fitting station or a Holden Dealer.

Top-tether child restraint systems (Crew cab)



A. Front of vehicle

The child restraint tether anchors are located at the rear of the rear seats in line with the three rear seating positions.

Note
Use the child restraint anchors for their designed purpose only.

Child restraint installation

When using a child restraint, read the installation instructions supplied with the child restraint and follow the directions for fitment carefully.

The child restraint system should be secured in conjunction with the vehicle's seat belt.

Secure the child in the restraint in accordance with the manufacturer's instructions.

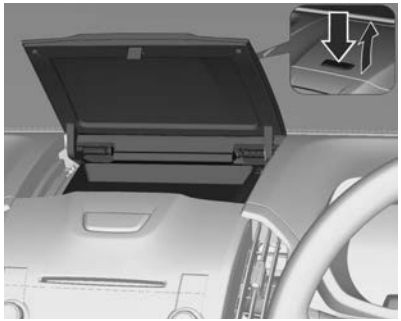
If unsure about installing a child restraint anchor fitting, contact an approved restraint fitting station or a Holden Dealer.

Storage

Storage compartments 45
Roof rack system 52
Loading information 52

Storage compartments

Instrument panel storage

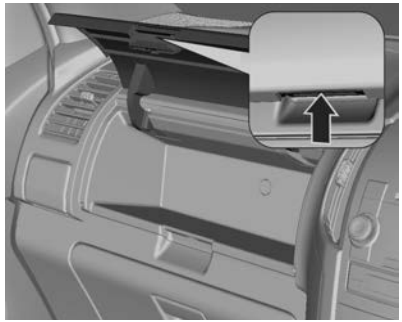


The vehicle may have a storage compartment located in the centre of the instrument panel.

- To open, press the button.
- To close, push the lid down until it latches into position.

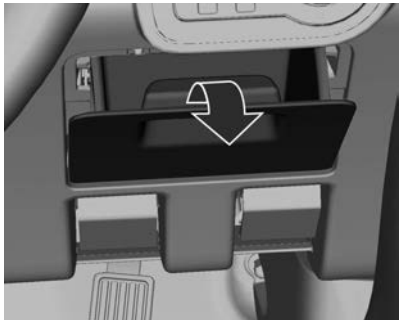
Caution

Do not leave glasses, CDs, CD cases or flammable items, such as a cigarette lighter, in the compartment when parked in direct sunlight or in hot weather, as they may become very hot.



A storage compartment is located on top of the glove box.

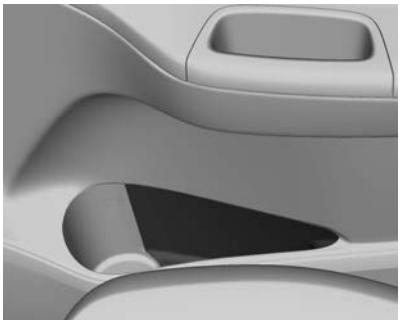
- To open, press the button on the lower front of the lid.
- To close, push the lid down until it latches into position.



A storage compartment is located under the light switch, on the driver side.

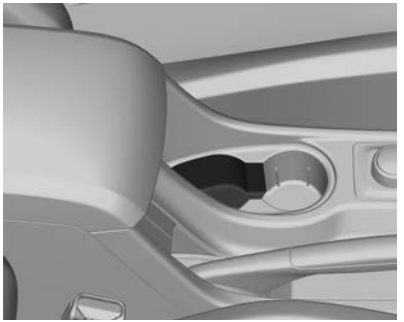
- To open, pull the lid rearwards.
- To close, push the lid until it latches into position.

Front storage



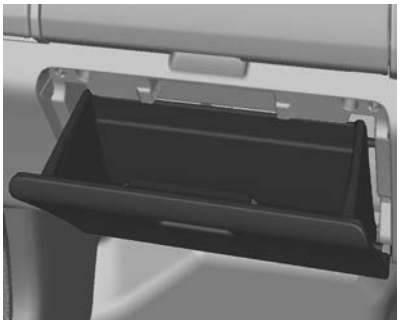
A storage compartment is located within each door.

The compartment has a bottle holder.



The vehicle may have a storage compartment located between the front seats.

Glove box



The glove box is located in the instrument panel, in front of the passenger's seat.

- To open, pull the handle rearwards.
- To close, push the lid firmly back into place.

⚠Warning

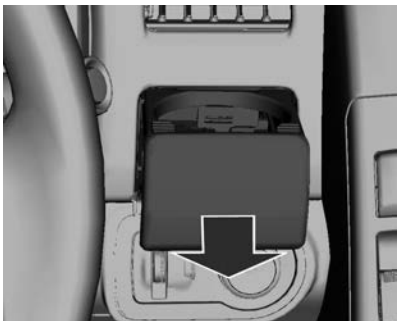
To reduce the risk of injury, always keep the glove box door closed when driving.

Cup holders

⚠Warning

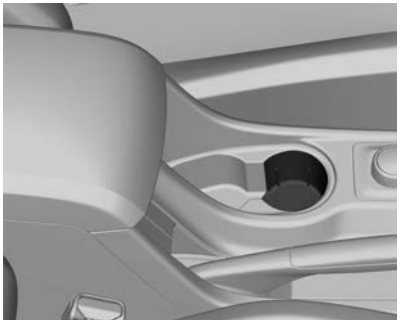
To avoid scalding, never place hot drinks in the cup holders.

Do not place uncovered containers of liquid in the cup holder while the vehicle is in motion.

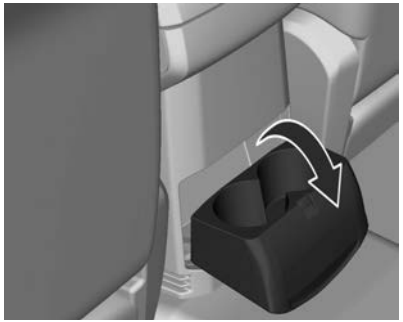


A cup holder is located under each side air vent.

- Pull to open.
- Push to close.



The vehicle may have cup holders located in the centre console, between the front seats.

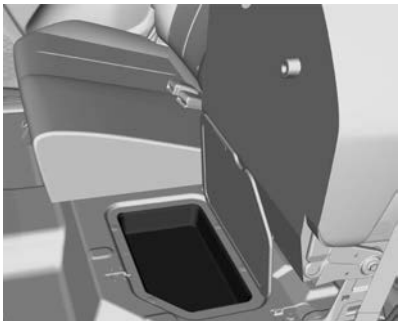


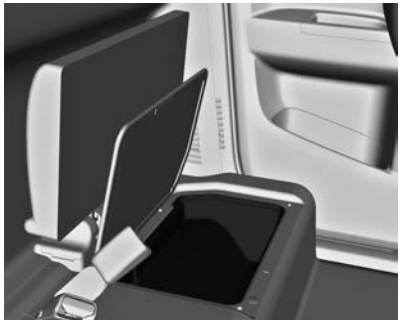
The vehicle may have cup holders located at the rear of the centre console.

- To open, pull the cover downwards.
- To close, push the lid firmly back into place.

Underseat storage

The vehicle may have rear seat storage compartments.

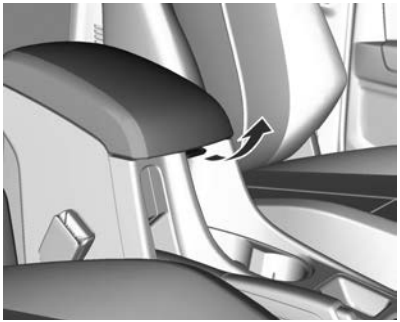




1. To access, lift the seat cushion.
2. To open the storage box, lift the lid.

Armrest storage

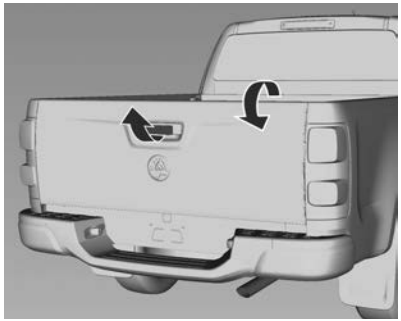
The vehicle may have a storage compartment located within the armrest.



1. To open, lift the latch.
2. Lift the armrest lid upwards.

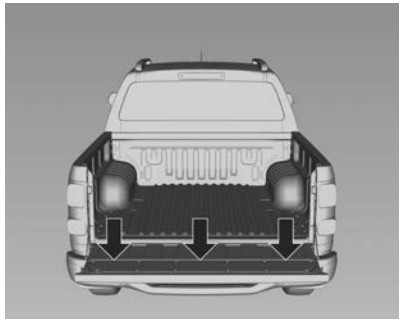
Load compartment

Tailgate



- To open, pull the centre handle and lower the tailgate.
- To close, raise the tailgate and press the upper sides until it engages.

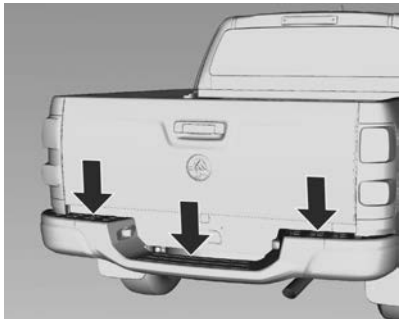
Load limit on the tailgate



To avoid damage to the tailgate, limit the load placed on it:

- Load placed in a single concentrated area: 100 kg
- Load which is evenly distributed: 150 kg

Load limit on the rear bumper



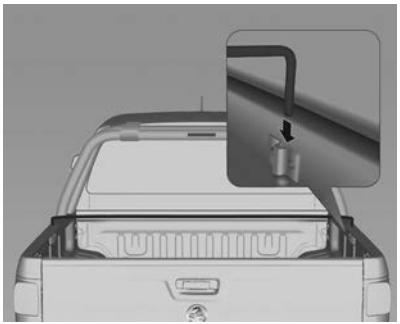
The maximum load on the rear bumper is 100 kg.

Additional storage features

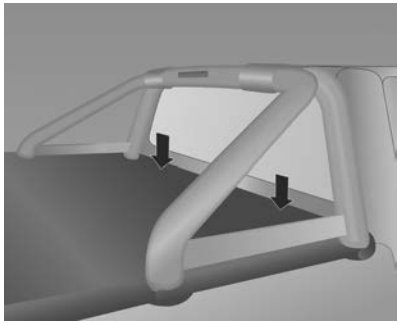
Soft tonneau cover

The vehicle may have a soft tonneau cover.

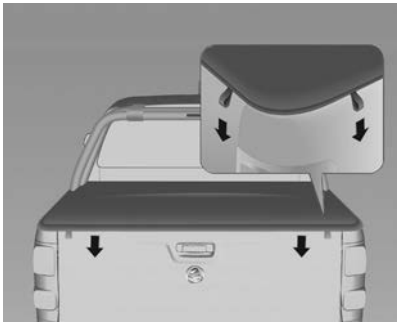
Installation:



1. Slide the bow through the tonneau bow support bracket.
2. Place the tonneau cover roughly in position with the tags positioned at the sides and rear of the vehicle.



3. Push down along the front edge of the cover until it is secure.



4. Starting from the rear, use the finger loops to pull the cover's plastic strip over the slot provided around the top edge of the load area.
5. Push down with your hands to smooth the rear strip into place along the slot.
6. After the cover is attached at the rear, fit along both sides beginning at the front of the vehicle.
7. Where a sports bar is fitted, wrap the velcro strips around the sports bar on each side and attach.

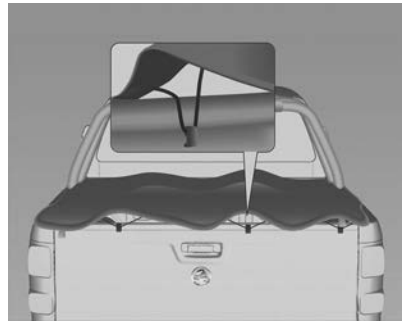
   Note
   The cover may be tight to fit when new.

Removal:

1. Using the finger loops provided, remove the cover by pulling the loops out and up.
2. From underneath the cover, remove the bar on one side, by pushing it towards the front of the vehicle and tilting down.

   The other end of the bar will follow.
3. For storage, fold the cover, ensuring the plastic sides are not bent.
4. Place in a secure location to prevent damage to the cover.

Fitting the tonneau cover with high loads



1. Remove the bow if required.
2. Attach the front of the cover. See Soft tonneau cover on page 50.
3. Lay the remainder of the cover roughly in position.
4. Underneath the cover there is a cord with attaching clips.

   Working around the vehicle, place the clips in the slot provided.
5. To remove the cover, pull the clips out and up.

Roof rack system

- Distribute the load evenly and secure tightly with straps.
- When carrying loads on the roof rack/ladder rack (elevated load), avoid hard braking, abrupt swerving or sharp steering.

  Roof rack/ladder rack elevated loads alter the handling of a vehicle.

⚠Warning

The total elevated load, including the weight of the cross bars, must not exceed 75 kg. Distribute the load evenly.

Note
The weight of the cross bars/ladder racks and the load must be included when calculating the total vehicle load.

Loading information

⚠Danger

Do not stack objects higher than the front seats.

Do not allow passengers to sit on the folded seatbacks while the vehicle is in motion. Serious injuries or death can result.

- Place all heavy objects in the load compartment as far forward as possible.
- Secure objects to prevent from sliding or being thrown out.

  Movement of heavy objects in the load compartment may change the handling of the vehicle.
- Distribute load weight evenly.
- Adjust the tyre pressures and vehicle speed according to the load conditions. Check and retighten the straps frequently. See Tyre pressure on page 192.
- Place heavier objects at the bottom.
- Do not drive with the tailgate open.
- Under no circumstances should people or animals be on the load compartment while the vehicle is moving.
- Do not exceed the maximum load weights. See Axle loads on page 191.
- Do not place any objects on the instrument panel.
- Ensure the backrests are securely engaged.
- Do not place unsecured objects in the passenger compartment.

Instructions and controls

Controls 53
Warning lights, gauges and indicators 57
Vehicle personalisation 74

Controls

Steering wheel adjustment

⚠Warning

Do not attempt to adjust the steering wheel while driving.

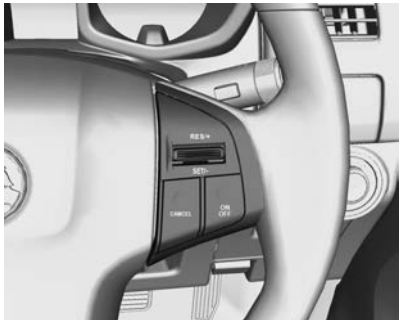
The vehicle may have steering wheel adjustment.

1. To unlock, move the lever down.
2. Adjust the steering wheel.
3. To lock, move the lever up.
4. Ensure the steering wheel is locked in position before driving.

Steering wheel controls

The vehicle may have steering wheel controls which can be used to operate the infotainment system.

See Steering wheel remote controls on page 83.



The vehicle may have cruise control which can be operated by using the controls on the steering wheel.

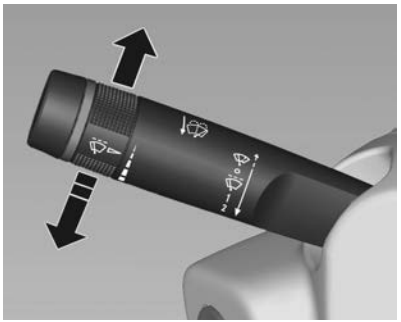
See Cruise control on page 133.

Horn

Press .

Windscreen wiper/washer

Windscreen wiper



Caution
Do not operate the wipers on dry glass or when covered with snow or ice, as this will damage the rubber and scratch the glass.

O: Off

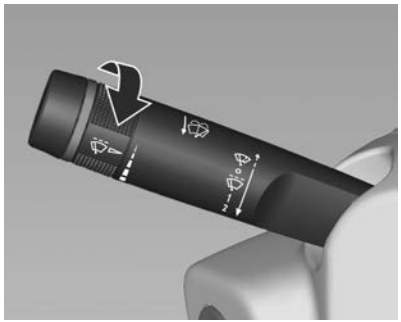
: Intermittent operation

1: Continuous wipe, slow speed

2: Continuous wipe, fast speed

For a single wipe of the windscreen, when the windscreen wipers are off, push the lever upwards.

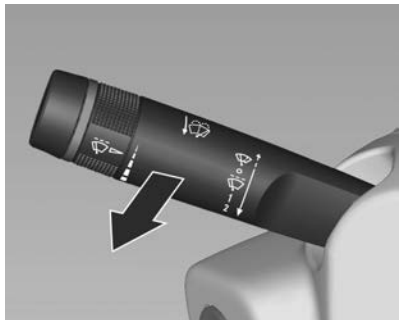
Adjustable wiper interval



During intermittent operation, adjust the frequency of the wiper intervals:

- For frequent intervals, rotate the wheel downwards.
- For longer intervals, rotate the wheel upwards.

Windscreen washer



- Pull the lever rearwards to wash the windscreen.

  Washer fluid is sprayed onto the windscreen and the wipers operate.

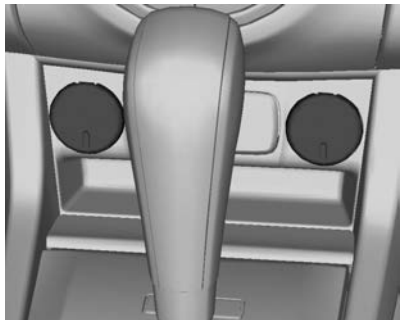
Caution

Do not operate the windscreen washer for more than a few seconds or when the washer fluid reservoir is empty.

Do not spray washer fluid on the windscreen in freezing weather.

Switch the wipers off when in a car wash.

Power outlets



The vehicle may have one or two 12V power outlets located in front of the shift lever and may have one power outlet located at the rear of the centre console.

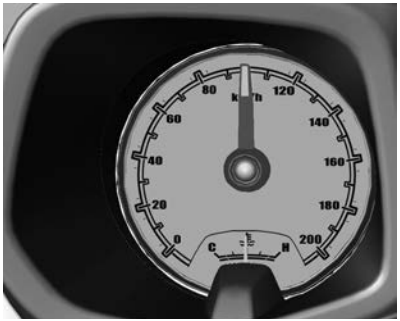
⚠Warning

It is dangerous for the driver of a vehicle to attach or remove accessories from the power socket while driving. It may distract the driver's attention, putting the occupants of the vehicle and other road users at risk.

- Do not exceed the maximum power consumption of 120 watts.
- The power outlet is deactivated 10 minutes after the ignition is turned off or a door is opened.
- The power outlet does not operate if the battery voltage is low.
- Do not connect electrical charging devices or batteries.

Warning lights, gauges and indicators

Speedometer



Shows vehicle speed in kilometres per hour (km/h).

Odometer

Shows distance travelled in kilometres.

Tachometer

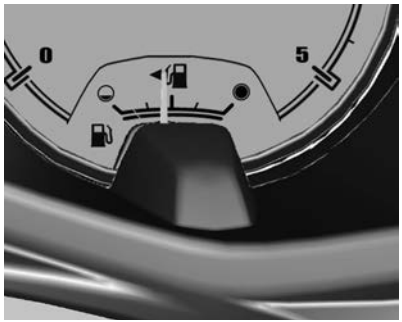
Shows engine speed in thousands of revolutions per minute (RPM).

Drive at a low engine speed/range for each gear, as much as possible.

⚠Warning

Do not allow the needle to remain in the warning/red zone.

Fuel gauge



Shows the level of fuel in the tank.

If the fuel level is low:

- ⛽ illuminates.
- A chime sounds.
- A message is displayed. Refuel immediately.

⚠Danger

Before refuelling, stop the vehicle and switch the engine off.

Note

- The arrow on the fuel gauge symbol indicates the side of the vehicle the fuel door is on.
- Never run the tank dry.
- If you operate the ignition switch while refuelling, the fuel gauge may not indicate the correct fuel level.
- On inclines, the fuel gauge may not indicate the correct fuel level due to movement of the fuel in the tank.

Engine coolant temperature gauge

Shows the engine coolant temperature.

(**C** = cold, **H** = hot)

If the gauge reading moves towards **H**, the engine is too hot:

- The chime sounds.
- A message is displayed in the Driver Information Centre (DIC). Contact a Holden Dealer. See Driver Information Centre (DIC) on page 66.

⚠Warning

Do not continue driving with the temperature gauge needle in the red area. The engine is too hot.

Continued operation of an overheated engine will result in severe engine damage. See Engine coolant on page 152.

Control indicators

1 Electronic Stability Control (ESC) 64
2 Tail lamp.....65
3 Tachometer 57
4 Immobiliser 65
5 Turn signal right 61
6 High beam 65
7 Turn signal left 61
8 Airbag and belt tensioners 62
9 Driver's seat belt reminder.....61
10 Speedometer 57
11 Malfunction indicator light 62
12 Brake system warning light.....63
13 Preheating system light 64
14 Engine coolant temperature gauge 58
15 Antilock Brake System (ABS) 63
16 Charging system.....62
17 Engine oil pressure 64
18 Driver Information Centre (DIC) 66

19 Cruise control.....65
20 Low fuel 65
21 Fuel gauge.....58
22 Front fog light.....65
23 Electronic stability control off 64
24 Front passenger's seat belt reminder.....62

The following warning lights and reminders may appear on the instrument panel.

A chime sounds with most warning lights and reminders.

Turn signal

- Push the lever in the same direction the steering wheel is turned.
- ⇦⇨ flashes.

  ⇦⇨ also flashes when the hazard warning is activated.
- If ⇦⇨ flashes quickly, see Bulb replacement on page 158.

See Electrical system on page 164.

See Turn and lane change signals on page 77.

Seat belt reminders

Driver's seat belt reminder

: Driver's seat belt reminder.

When the ignition is turned to the ON position:

- illuminates until the seat belt is fastened.

When the engine is running:

- flashes until the seat belt is fastened.
- If the vehicle reaches a specific distance or speed and the seat belt is unfastened, will flash and the chime will sound for a few seconds, or until the seat belt is fastened.

Front passenger's seat belt reminder (Crew cab)

: Front passenger's seat belt reminder.

When the ignition is turned to the ON position:

- illuminates.
- extinguishes if the front passenger's seat is not occupied.

If the front passenger's seat is occupied when the engine is started:

- illuminates until the front passenger's seat belt is fastened.

See Three point belt on page 34.

Airbag and belt tensioners light

- The warning light illuminates for a short time when the ignition is turned on to show that the light is working.
- If the warning light does not illuminate, does not extinguish after few seconds or illuminates while driving, there is a problem with the airbag or belt tensioner system.

⚠Warning

Have any fault in the airbag or belt tensioner system repaired immediately by a Holden Dealer.

See Airbag system on page 37.

See Belt tensioners on page 34.

Charging system light

- The warning light illuminates for a short time when the ignition is turned on to show that the light is working.
- If the warning light illuminates while the engine is running, there is a problem with the charging system:
  1. Stop the vehicle and switch off the engine.
  2. Contact a Holden Dealer.

Malfunction indicator light

- The warning light illuminates when the ignition is turned on to show that the light is working.
- If the warning light illuminates or flashes while driving, there is a problem with the emission monitoring system. Contact a Holden Dealer.

Brake system warning light

- The (!) warning light illuminates for a short time when the ignition is turned on to show that the light is working.
- The (!) warning light illuminates when the park brake is applied. See Park brake on page 130.

⚠Warning

Do not drive while the brake system warning light is on.

If the (!) warning light does not extinguish or illuminates while driving and the park brake is released, there is a problem with the brakes:

- Stop the vehicle as soon as it is safe to do so.
- Check the brake fluid level. See Brake fluid on page 155.
- Do not proceed until satisfied that braking is possible or that the cause of the problem has been repaired.
- If necessary contact a Holden Dealer.
- If the parking brake is not fully released when the vehicle is moving, after reaching a certain speed, the chime sounds and a message is displayed in the Driver Information Centre (DIC).

Antilock Brake System (ABS) warning light

- The (ABS) warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the light:

- Does not flash or stays on when the ignition key is turned on
- Remains on while driving

  Carefully stop the vehicle and turn off the engine.
- If both the (ABS) and the (!) warning lights illuminate, there is a problem with both the ABS and the regular brakes.

  Contact a Holden Dealer immediately.

Note

- The vehicle's brakes will still operate but without the assistance of the ABS.
- See Antilock Brake System (ABS) on page 129.

Electronic Stability Control (ESC) light

- The warning light illuminates for a short time when the ignition is turned on to show that the light is working.
- The light flashes while driving, to show that the ESC is actively helping the vehicle with road grip and stability.
- If the light illuminates or does not extinguish while driving, contact a Holden Dealer immediately.
- See Driver Information Centre (DIC) on page 66 and Electronic Stability Control (ESC) on page 132.

Electronic Stability Control (ESC) off light

- The warning light illuminates for a short time when the ignition is turned on to show that the light is working.
- If the light does not illuminate, contact a Holden Dealer.
- illuminates when the ESC is deactivated.
- See Driver Information Centre (DIC) on page 66 and Electronic Stability Control (ESC) on page 132.

Preheating system light

- When the ignition key is turned ON, illuminates and will stay illuminated until the engine is sufficiently warmed.
- The preheating system switches on only if the outside temperature is low.
- See Starting the engine on page 119.

Engine oil pressure light

- The warning light illuminates for a short time when the ignition is turned on to show that the light is working.

If the light illuminates while driving:

- The oil pressure is dangerously low.

  Stop the vehicle as soon as possible and check the engine oil level.
- See Engine oil on page 151.
- Do not drive the vehicle with the light illuminated. Contact a Holden Dealer.

Caution
Engine damage may result if you keep driving. Do not run the engine. If the oil level is normal, have the system checked by the nearest Holden Dealer.

Low fuel light

- The warning light illuminates for a short time when the ignition is turned on to show that the light is working.
- The light illuminates when the fuel tank is approaching empty.

  Add fuel as soon as possible.
- If the engine is run to empty, the fuel system must be bled. See Diesel fuel system bleeding on page 157.
- See Fuel types on page 136 and Fuel system on page 70.

Immobiliser light

- The warning light illuminates for a short time when the ignition is turned on to show that the light is working.
- If the light remains on, contact a Holden Dealer.
- See Immobiliser on page 22.

Tail lamp light

The indicator light illuminates when the tail lamps are on.

See Exterior lighting on page 75.

High beam light

The indicator light illuminates when headlamp high beam is on.

See Headlamp high/low beam on page 75.

Fog light

The vehicle may have front fog lamps.

- illuminates on the instrument panel when the lamps are in use.
- See Front fog lamps on page 77.

Cruise control light

The vehicle may have cruise control.

- illuminates on the instrument panel when the cruise control has been set.
- The light extinguishes when cruise control is turned off.
- See Cruise control on page 133.

Information displays

Driver Information Centre (DIC)

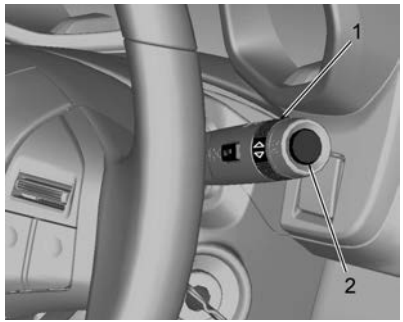
The DIC is located on the instrument panel.

It displays:

- Information about the vehicle.
- Warning messages if a system problem is detected.

See Vehicle messages on page 67.

Selecting functions



The menus and functions can be selected by using the switches on the lever.

1. Press **MENU** to switch between the following menus:
   - Vehicle information menu
   - Trip/fuel information menu
2. Rotate the adjuster wheel (1) to scroll through the items within each menu.
3. Press **SET/CLR** (2) to select a function, to change a setting or to confirm a message.

See Trip computer on page 72 and Vehicle personalisation on page 74.

Vehicle messages

Messages are displayed on the Driver Information Centre (DIC) or may be audible as a warning chime.

- Not all messages are displayed on all vehicles.
- Some settings can be changed in the personalisation menu.

See Vehicle personalisation on page 74.

Note
Some of the following messages require immediate action to prevent vehicle or engine damage.

Battery voltage and charging

Battery Saver Active

- The message displays when the battery voltage is low.
- The battery saver system may disable some battery saving features.

  A message is displayed.
- Turn off unnecessary accessories to allow the battery to recharge.

Low Battery

- The message is displayed when the battery voltage is low.

Service Battery Charging System

- The message is displayed when there is a fault in the battery charging system.
- Contact a Holden Dealer.

Brake system

Brake Fluid Low

- The message is displayed when the brake fluid level is low.
- See Brake fluid on page 155.

Release Parking Brake

- The message is displayed when the parking brake is on.
- Release the parking brake while driving the vehicle.

Cruise control

Cruise Set to (...)

- The message displays when the cruise control is set and shows the speed it was set to.
- See Cruise control on page 133.

Door ajar

Door Open

- The message is displayed when one or more doors are open.
- Close the door completely.

Hood Open

- The message will display when the bonnet is open.
- Close the bonnet completely.

Engine cooling system

Engine Overheated – Idle Engine

- The message displays and a continuous chime sounds if the engine cooling system reaches unsafe temperatures for operation.
- Stop the vehicle as soon as it is safe to do so and turn the engine off, to avoid severe damage.
- The message clears when the engine has cooled to a safe operating temperature.

Oil Pressure Low – Stop Engine

- The message displays if the oil pressure is low.
- Stop the vehicle as soon as it is safe to do so and turn the engine off.
- Check the oil as soon as possible. See Engine oil on page 151.

Caution
Engine damage may result if you keep driving. Do not run the engine. If the oil level is normal, have the system checked by the nearest Holden Dealer.

Engine Power is Reduced

- The message displays when the vehicle's engine power is reduced.

Note

- Although the vehicle may still be drivable, the accelerator input available may be limited, resulting in reduced power.
- Have the problem repaired by a Holden Dealer as soon as possible.

Transmission messages

Press Clutch to Start Engine

(Manual transmission)

- The message displays when attempting to start the vehicle without pressing the clutch pedal.

Service Transmission

(Automatic transmission)

- The message displays if there is a problem with the transmission.
- Contact a Holden Dealer.

Shift Denied

(Automatic transmission)

- The message displays when the transmission has not shifted to the selected gear, as the current vehicle speed will result in an engine speed outside the suitable range.
- See Manual mode on page 122.

Transmission Hot – Idle Engine

- The message displays when immediate action by the driver is necessary to prevent transmission failure.
- Stop the vehicle as soon as it is safe to do so and turn the engine off.

Service 4WD

- The message is displayed when there is a problem with the Four-Wheel Drive system.
- Contact a Holden Dealer.

Fuel system

Fuel Level Low

- The message displays when the fuel level is low and remains displayed until the fuel tank is filled above the low fuel level.

Water in Fuel – Contact Service

- The message displays when water is detected in the fuel.
- See Diesel fuel filter on page 157 or contact a Holden Dealer.

Lamp messages

Check Brake Lamps

- This message displays if a brake bulb needs to be replaced.

Ride control systems

Service ESP

- The message displays if there is a problem with the Electronic Stability Control and/or Traction Control system.
- Contact a Holden Dealer.

ESP OFF

- The message displays when the Electronic Stability Control system has been switched off manually by pressing OFF on the instrument panel.

Traction Control ON

- The message displays when the Traction Control (TC) system has been switched on manually by pressing OFF on the instrument panel.

Traction Control OFF

- The message displays when the Traction Control (TC) system has been switched off manually by pressing OFF on the instrument panel.

Key and Lock

Replace battery in Remote Key

- The message displays when the battery in the Remote Keyless Entry (RKE) transmitter needs to be replaced.

Airbag system

Service Airbag

- The message displays if there is a problem with the airbag system.
- Contact a Holden Dealer.

Vehicle speed

Selected Speed Warning Exceeded

- The message is displayed when the vehicle speed is greater than the adjusted set speed.

Vehicle Reminder

Ice Possible Drive with Care

- The message is displayed when icy conditions are possible.

Anti-Theft Alarm System

Theft Attempted

- The message displays if a theft has been attempted.
- While the ignition is on, press **MENU** to clear the message. See Vehicle personalisation on page 74.
- See Vehicle security on page 21.

Service Theft Deterrent System

- The message displays if there is a problem with the vehicle security system.
- Contact a Holden Dealer.

Warning chimes

Warning chimes may be heard when starting the engine or while driving:

- If seat belt is not fastened. See Seat belts on page 33.
- If a certain speed is exceeded while the parking brake is applied. See Park brake on page 130.
- If a warning message is displayed.
- If the vehicle speed exceeds the adjusted speed value. See Speed warning on page 74.

Warning chimes may be heard when the vehicle is parked and/or a door is opened:

- Until the engine is started with the key. See Keys and locks on page 16.
- When the exterior lights are on while the engine is off. See Exterior lighting on page 75.

Trip computer

The trip computer:

- Is located in the Driver Information Centre (DIC).
- Provides information on average speed, range, average consumption and driving time.
- Some settings can be reset by pressing **SET/CLR.**

1. Press **MENU**.
2. Rotate the adjuster wheel to scroll through the following menu items:
   - Digital speedometer
   - Trip 1 and 2
   - Fuel range
   - Average fuel economy
   - Average vehicle speed
   - Fuel used
   - Timer
   - Outside air temperature

Digital speedometer

- The digital speedometer indicates the vehicle speed.

Trip 1/Trip 2

- The display shows the current distance travelled since the trip odometer was last reset.
- Reset by pressing and holding **SET/CLR** while the trip odometer is displayed.
- When the maximum value is reached (99999.9), the trip odometer will automatically set to zero.

Fuel range

The fuel range:

- Displays the approximate distance the vehicle can be driven without refuelling.
- Estimate is based on an average of the vehicle's fuel economy over the recent driving history and the amount of fuel remaining in the fuel tank.

When the fuel range estimate is less than 64 km:

- **Low Fuel Range** is displayed instead of the fuel range estimate
- illuminates
- A chime sounds
- A message is displayed

Note
The range is an estimate only and may vary based on driving style and variation in the fuel gauge reading.

See Low fuel light on page 65 and Driver Information Centre (DIC) on page 66.

Average fuel economy

- The average fuel economy is calculated on average fuel consumption, recorded since the last time the menu was reset.
- To reset, press and hold **SET/CLR**.

Average vehicle speed

- The average vehicle speed is calculated on the various vehicle speeds recorded since the last time the menu was reset.
- To reset, press and hold **SET/CLR**.

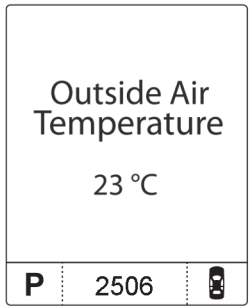
Fuel used

- The fuel used is calculated on the fuel consumption since the last time the menu was reset.
- To reset, press and hold **SET/CLR**.

Timer

- The timer measures the time that has passed since the last reset, using the elapsed time.
- Elapsed time can be turned on or off.
- To reset, press and hold **SET/CLR**.

Outside air temperature



- Displays the outside temperature, measured in degrees Celsius (°C).

Vehicle personalisation

The settings can be personalised in the Driver Information Centre (DIC).

Note
Depending on the vehicle variant, some of the following functions may not be available.

1. Press **MENU** until **Vehicle Information Menu** is displayed.
2. Rotate the adjuster wheel to scroll through the following menu items:
   - Battery voltage
   - Speed warning
   - Language
   - Transmission fluid temperature
   - Hourmeter
3. To close or to return to the previous page, press **MENU**.

Battery voltage

- Displays the current battery voltage.

Speed warning

The speed warning allows a warning signal to be set, at a chosen speed.

To set the speed warning:

1. Press **SET/CLR**.
2. Rotate the adjuster wheel to select **On**.
3. Press **SET/CLR**.
4. Rotate the adjuster wheel to select a speed.
5. Press **SET/CLR** to confirm.

Language

To reset the language:

1. Press **SET/CLR** to view the available languages.
2. Rotate the adjuster wheel to make a selection.
3. Press **SET/CLR** to confirm.

Transmission fluid temperature

(Automatic transmission)

- Displays the current temperature of the transmission fluid.

Hourmeter

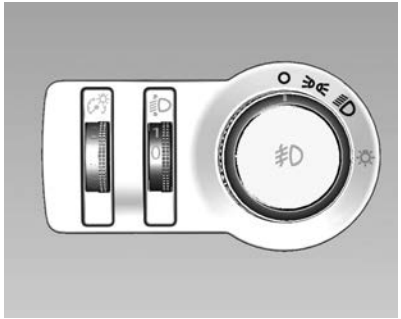
- Displays the number of hours the engine has been running.

Lighting

Exterior lighting 75
Interior lighting 78
Lighting features 79

Exterior lighting

Exterior lamp control



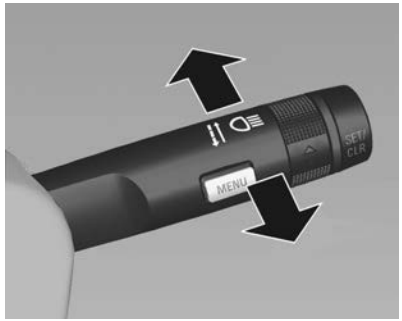
O (OFF): Rotate to turn all lamps and lights off.

(Park lamps): Turns on the park lamps, number plate lamps and instrument panel lights.

D (Headlamps): Turns on the headlamps and all park lamps.

Note
A chime sounds, when the ignition is turned off, the driver door is opened and the exterior lights are left on.

Headlamp high/low beam



To activate high beam:

1. Turn the headlamps on.
2. Push the lever forwards.

   The high beam indicator light D illuminates on the instrument panel.

To return to low beam:

1. Pull the lever rearwards.

⚠Warning

Always switch the headlamps to low beam when vehicles are approaching or when following another vehicle.

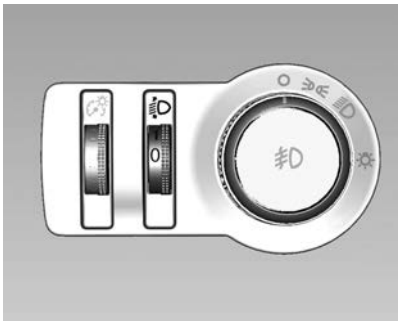
To flash the high beam lamps:

- Pull the lever towards the rear of the vehicle and release.
- The lamps stay on for as long as the lever is held.

Headlamp range adjustment

The vehicle may have headlamp range adjustment.

Adjust the headlamp range according to the vehicle load, to ensure illumination of the road ahead.



Rotate to the required position:

0: Front seats occupied

0 or **1**: All seats occupied

2 or **3**: All seats occupied and load compartment laden

Hazard warning flashers

- Press ⚠ to turn the hazard warning flasher on or off, when the ignition is in any position.

  All turn signals flash continuously.
- Use the hazard warning flasher if the vehicle becomes a traffic hazard, day or night.

Note

Using hazard warning flashers while the vehicle is moving, is illegal in some States and Countries.

Turn and lane change signals

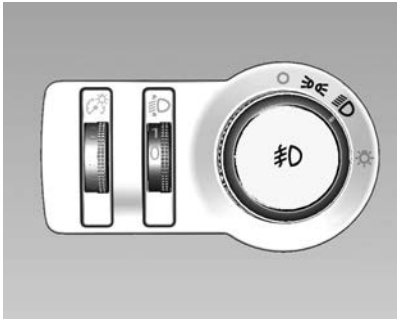
- Push the lever in the direction the steering wheel is turned.
- A green arrow on the instrument panel flashes when the lamps are in operation.

For several flashes, e.g. when changing lanes:

- Push the lever until the point of resistance, then release.

Front fog lamps

The vehicle may have front fog lamps.



The front fog lamps provide extra illumination to the sides of the road and improve visibility in fog or snow.

To switch the front fog lamps on:

1. Rotate the lamp control to ≡D.
2. Press ≠D.

   ≠D illuminates on the instrument panel.

Reversing lamps

The reversing lamps illuminate when the ignition is on and reverse gear is engaged.

- **R** illuminates

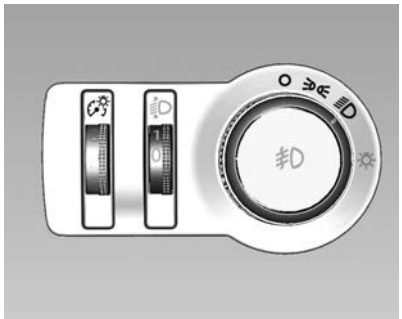
Misted lamp covers

Caution

Condensation may temporarily appear on the inside of exterior lamp lenses after rain or washing the vehicle. Condensation occurs when there is a temperature difference between the inside and outside of the lamp allowing a fine mist on the inside surface of the lamp lens. This condensation will disappear when the vehicle is in a dry environment or the lamp is on. If water does collect in the lamp contact a Holden Dealer.

Interior lighting

Instrument panel illumination

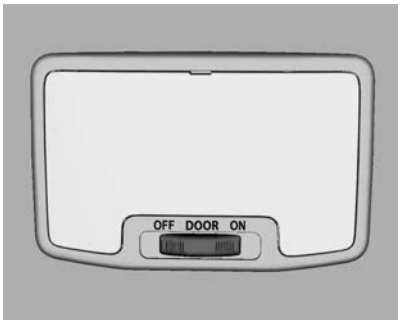


To adjust the instrument lighting brightness:

1. Rotate .
2. Hold until the required brightness is reached.

Interior lamps

Courtesy lamp



Slide the switch:

OFF: Remains off when doors are opened or closed.

DOOR: Automatically switches on when a door is opened and turns off after doors are closed.

ON: Remains on when doors are opened or closed.

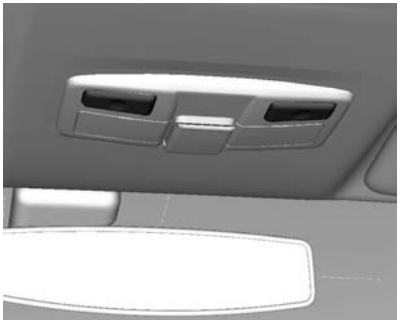
Note

To prevent the battery from discharging, turn the lamp off when the engine is not running.

⚠Warning
Do not leave the courtesy lamp on while driving in the dark.

Reading lamps

The vehicle may have reading lamps.

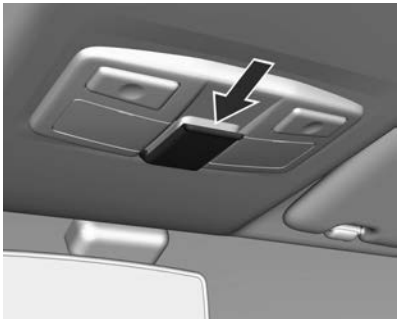


The reading lamps are located between the sun visors.

1. Press the button to turn the lamp on.

   The passenger or driver front lamp illuminates.
2. Press again to turn the lamp off.

Ticket holder



A parking ticket holder is located between the reading lamps.

- Pull downwards slightly, to insert a ticket.

Caution
Do not insert large quantities of paper, as it may break the holder.

Lighting features

Entry lighting

Entry lighting provides additional security when returning to the vehicle at night.

- Press on the key.

  Interior lights illuminate for a short time.
- The lighting switches off when the ignition is turned to the ACC position.
- Additionally, some interior lights and switches will switch on when driver's door is opened.

  See Ignition positions on page 118.

Exit lighting

Headlamps illuminate the way after leaving the vehicle.

1. Slide the switch to **DOOR**. See Interior lamps on page 78.
2. Switch the ignition off.
3. Remove the ignition key.
4. Open the driver's door.
5. Pull the turn signal lever rearwards.
6. Close the driver's door.

Note
Exit lighting is activated for 30 seconds after the driver's door is closed.

Infotainment system

Introduction 81
Setting the clock 86
Radio 87
Audio players 90
CD player 90
Auxiliary devices 96
USB port 101
Bluetooth® phone 103

Introduction

General information

Do the following before driving:

- Read the infotainment system section to become familiar with the functions.
- Set up the audio by presetting favourite stations, setting the tone and adjusting the speaker settings.

About the system

⚠Warning

When driving the vehicle, be sure to keep the volume of the unit set low enough to hear sounds from outside the vehicle (e.g. road and traffic conditions).

Caution

Do not place beverages close to the audio system.

Do not strike or allow anything to impact the audio system.

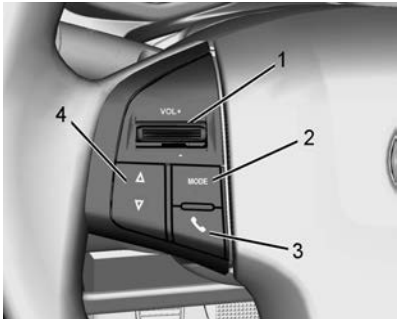
Damage to the system mechanisms could occur.

Overview

1. Volume/power button
2. CD eject button
3. CD slot
4. Information display
5. Scan button
6. Auto programming button
7. Tune button
8. Set for menu
9. Menu button
10. USB/AUX button
11. USB/AUX port
12. Text button
13. Seek button (radio)
    Next/previous track button (CD, AUX)
14. Bluetooth® phone button
15. Function buttons
16. Disc button (CD, MP3)
17. FM/AM selection button (radio)

Steering wheel remote controls

The vehicle may have steering wheel remote controls.



1. Volume switch:

   Press upwards to increase the volume.

   Press downwards to decrease the volume.

2. Mode button:

   Press to select another audio source.

3. Call button:

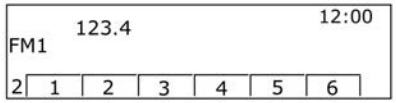
   Press to answer or end the call, or enter the phone mode.

4. Selection button:

   Press to move up or down within the selection.

Operation

Power on/off

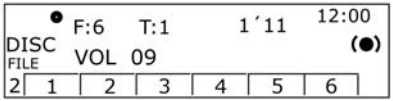


1. Press **VOL/PWR** (1) to turn the power on.

   The previous radio station, track or audio source will play.

2. Press **VOL/PWR** (1) to turn the power off.

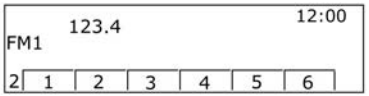
Volume control

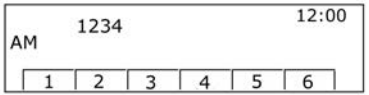


- Rotate **VOL/PWR** (1) to adjust the volume.
- Alternatively, press the switch (1) on the steering wheel remote controls, upwards or downwards.

  The volume is displayed.

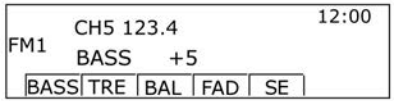
Tone settings

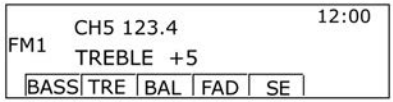


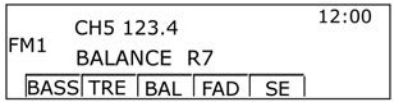


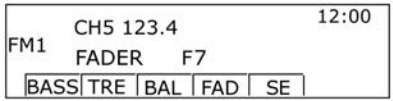
From the tone settings menu, sound features can be adjusted separately for the FM/AM selection and the other audio player functions.

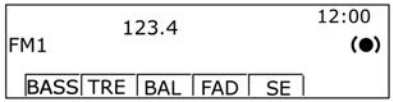
1. Press **TUNE FILE/PUSH MODE** (7).
2. Rotate **TUNE FILE/PUSH MODE** (7) to select a value.
3. Press a function button (15) to select other features to adjust.











Tone setup menu

- Bass: Adjust the bass level from -5 to +5.
- Treble: Adjust the treble level from -5 to +5.

- Balance: Adjust the left/right side speaker balance from left 7 to right 7.

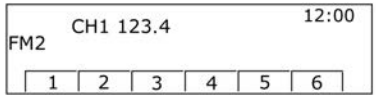
The vehicle may have rear speakers.

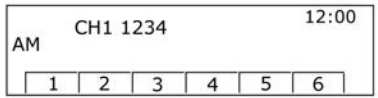
- Fader: Adjust the front/rear speaker fader from front 7 to rear 7.
- SE (Sound Effect control): Turn the sound effect on or off to improve the bass and focus.

  (●) is displayed when active.

Select function

FM/AM radio





To select between FM and AM stations:

1. Press **FM AM** (17).
2. Press a function button (15) to select a stored station.

   To save a radio station to a preset, see Radio on page 87.

CD/MP3/USB or (AUX) input

- Press **DISC** (16) to select CD or MP3.
- Press **USB AUX** (10) to select an auxiliary or USB device.

  Alternatively, press **MODE** on the steering wheel remote controls.
- Press **MENU** (9).

  Menu options are displayed, when available.

Bluetooth® hands-free phone device

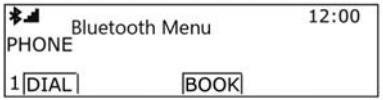
To select Bluetooth® phone mode:

- Press **PHONE** (14).

To exit Bluetooth® phone mode:

- Press **PHONE** (14) again.

  Alternatively, press on the steering wheel remote controls.



To display Bluetooth® options for the relevant function:

- Press **MENU** (9).

See Bluetooth® phone on page 103.

⚠Warning

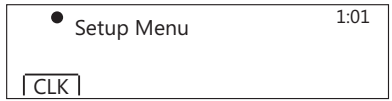
Do not use a mobile phone when driving.

Make sure that Bluetooth® is activated before driving. If not stop at a safe place to use a mobile phone.

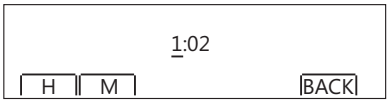
Setting the clock

1. Press **SET** (MENU) (9) for more than 2 seconds.

   Setup Menu is displayed.



2. Press the function button (15) below **CLK**.



3. Press the function button (15) below **H** to adjust hours.

   The hour is underlined.
4. Rotate **TUNE FILE/PUSH MODE** (7) to adjust the hours.
5. Press the function button (15) below **M** to adjust minutes.

   The minutes are underlined.
6. Rotate **TUNE FILE/PUSH MODE** (7) to adjust the minutes.
7. Press the function button (15) below **BACK** to store, then press **SET** (MENU) (9) to exit.

   Alternatively, wait approximately 7 seconds to exit.

Radio

AM-FM radio

Main buttons and controls:

Automatic programming

- Press and hold **SCAN** (5) to store all available radio stations.
- Press to find the next available radio station.
- Press **SCAN** (5) again to cancel search.

Tune/file button

- Rotate **TUNE FILE/PUSH MODE** (7) to manually search for a radio frequency.

Seek buttons

- Press **SEEK TRACK** (13) to search for the next radio station.

Preset buttons

- Press and hold any function button (15) to save the current radio station.

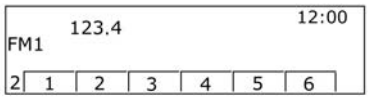
  A beep sounds when the radio station is stored.
- Press a button to select the radio station linked to the preset.

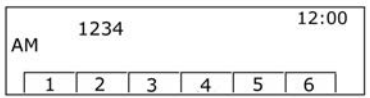
Radio band button

- Press **FM AM** (17) to toggle between FM or AM radio.

Listening to a radio station

Searching for radio stations

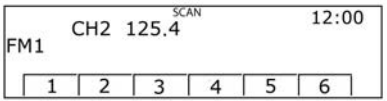




To toggle between FM or AM radio:

- Press **FM AM** (17).

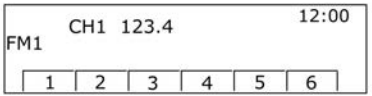
Automatic station search

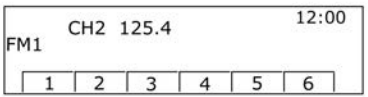


To automatically search for available radio stations with clear reception:

1. Press **SCAN** (5).
2. Press **SCAN** (5) again to cancel.

Seeking

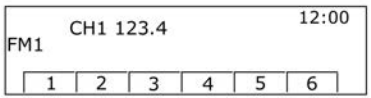


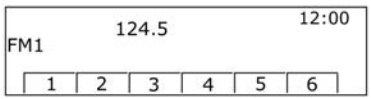


To search for the next radio station:

1. Press **SEEK TRACK** (13).
2. Press **SEEK TRACK** (13) again to find the next radio station, if required.

Searching for a radio station manually

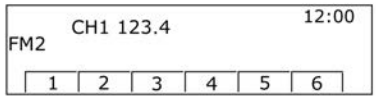


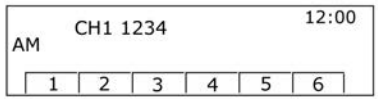


To manually search for a radio frequency:

- Rotate **TUNE FILE/PUSH MODE** (7).

Using the preset buttons





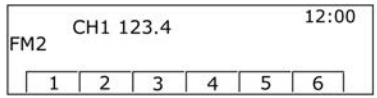
To store a radio station to a preset:

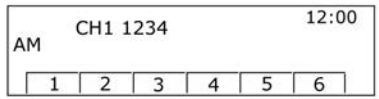
- Press and hold a function button (15).

  Six radio stations can be saved in the AM mode, six in the FM1 mode and six in the FM2 mode.

  If a new radio station is to be added to a function button (15) which has an existing radio station linked to it, the previous radio station will be deleted and replaced with the new radio station.

Listening using a preset

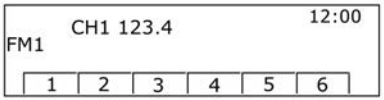


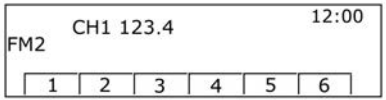


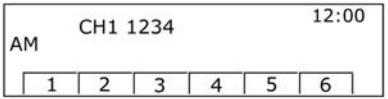
To listen to a radio station saved to a preset:

- Press a function button (15).

Radio band selection



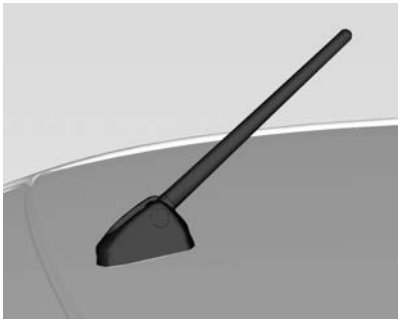




To toggle between FM1, FM2 and AM radio:

- Press **FM AM** (17).

Antenna



The roof antenna can be angled towards the front or the rear of the vehicle.

Caution
Remove the antenna mast by rotating anticlockwise before entering an area with a low ceiling or an automatic car wash. Damage may occur to the antenna or the roof panel.

Audio players
CD player

General information

Caution
If a label is added to a CD, or more than one CD is inserted into the slot at a time or an attempt is made to play scratched or damaged CDs, the CD player could be damaged. Use only CDs in good condition without any labels, load one CD only and keep the CD player and the loading slot free of foreign materials, liquids and debris.

If a description label is required, write on the top of the CD with a CD marking pen.

Caution
Avoid inserting any foreign objects into the slot of the player. Failure to observe this may cause malfunction.

CD-R format

Sound quality may be reduced due to:

- Method of recording
- Recording quality
- CD handling

Handling CDs

- Avoid leaving fingerprints on the CD when removing it.
- Store any CDs in their protective covers.
- Ensure that CDs are clean and dry before inserting.
- Protect CDs from heat and direct sunlight.
- Insert the disc with the printed side facing up.

Audio system care

Do not clean using cleaning fluid, alcohol or other solvents. Use only a damp cloth.

CD/MP3

Main buttons and controls.

Eject button

- Press ⏏ (2) to eject a disc.

Tune/file button

1. Rotate **TUNE FILE/PUSH MODE** (7) to scroll through the track list, menu or MP3/WMA track information.
2. Press **MENU** (9) to display the current selection or current mode.

Information button

- Press **TEXT** (12) to view available file information for the track being played.

Seek buttons

- Press **SEEK TRACK** (13) to play the previous or next track.
- Press and hold to fast rewind/ fast forward through the currently playing tracks. Release the button to stop seeking.

Preset buttons

- Press a function button (15) to select the function shown in the display.

Disc selection button

- Press **DISC** (16) to select the CD/MP3 player.

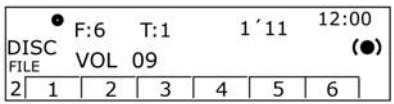
Scan button

- Press **SCAN** (5) to start scanning through the first 10 seconds of all the tracks/files.

See Overview on page 82.

Inserting a disc

- Insert the disc with the printed surface facing upwards.



Track 1 will play automatically.

Note

- A non-readable disc will display a disc error message.

  Press △ (2) to eject the disc and switch to the previously used mode.
- To play a CD when in a different mode, press **DISC** (16).

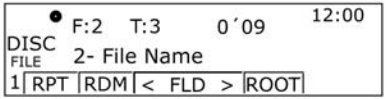
Ejecting a disc

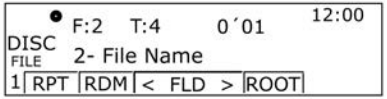
1. Press △ (2).
2. Remove the disc.

   The audio system will switch to the previously used mode.

Using the CD menu

Previous/next track



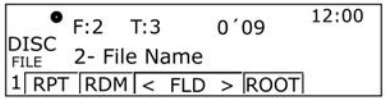


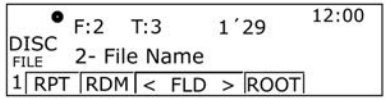
To play the previous or next track:

- Press **SEEK TRACK** (13) during play.

  Alternatively, press △ or ▽ on the steering wheel remote controls.

Fast rewind/reverse

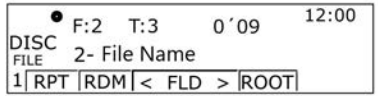


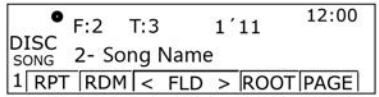


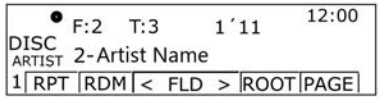
1. Press and hold **SEEK TRACK** (13) during play to rewind or fast-forward through a track.
2. Release the button to resume playing at normal speed.

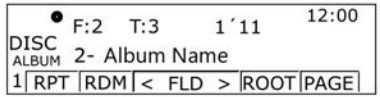
   The elapsed time is displayed.

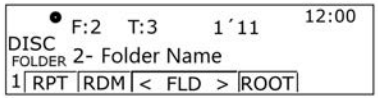
File information











To view information on the current audio CD track:

1. Press **TEXT** (12).

2. Press the function button (15) below PAGE to view more information on the current track.

   Note

   If no information is available, previous information will remain displayed.

To view more information on the current MP3/WMA track:

- Press **TEXT** (12) while the track information is displayed.

  Note

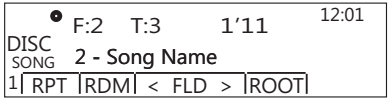
  The information displayed includes the file name, folder name and ID3 Tag information saved with the track.

  If incorrect ID3 Tag information (e.g. artist, song title) was added to the MP3/WMA file before burning to disc, this information will be displayed.

  Incorrect ID3 Tag information cannot be modified or corrected on the audio system.

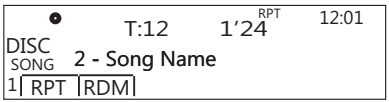
- Information for tracks shown in symbols or in unavailable languages may be displayed as ---- or are not displayed at all.

Changing the playback mode



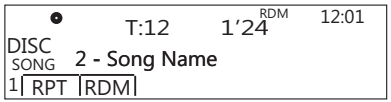
- During play, press **MENU** (9) to display the CD menu.

Repeat



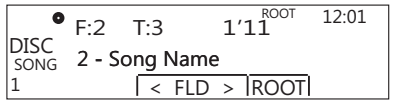
- Press the function button (15) below RPT to turn repeat mode on or off.
- RPT is displayed.
- The current song is repeated.

Random



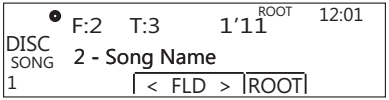
- Press the function button (15) below RDM to turn random mode on or off.
- When F.RDM is displayed, all tracks in the current folder are played randomly.
- When RDM is displayed, all tracks are played randomly.

Search



- Press the function buttons (15) below < FLD > to move to the required folder.

Root directory



- Press the function button (15) below ROOT to move to the first track in the root directory or folder 1.
- ROOT is displayed.

Auxiliary devices

General information

- Devices able to be connected to the infotainment system are; iPod® devices, USB sticks and MP3 players.
- Connect using either the USB port or the 3.5 mm socket.

USB player

Cautions when using USB devices

- Operation cannot be guaranteed if a HDD USB mass storage device, or a CF or SD memory card is connected by using a USB adaptor. Use a USB flash memory type storage device.
- Avoid static electricity when connecting or disconnecting the USB device. Avoid connecting and disconnection over a short time.
- Avoid touching the USB connecting terminal with any objects or fingers.
- The USB device can only be recognised when it is formatted in FAT16/32 file format.
- Recognisable file name extensions include, MP3/WMA files with mp3, .wma, .MP3 or .WMA.
- Only devices with an allocated unit size of 512 Byte/Sector or 2,048 Byte/Sector can be used.
- ID3 tag (version 1.0, 1.1, 2.2, 2.3, 2.4) information for MP3 files can be displayed.
- MP3 files which use VBR can be played.
- A maximum of 64 characters can be recognised for folder or file names.
- Music files to which DRM (Digital Right Management) is applied cannot be played.

- Depending on the type and capacity of the USB device and the type of stored files, the time it takes to recognise the files may differ.
- Do not disconnect the USB device while it is being played.

  This may damage the product or affect the performance of the USB device.
- Disconnect the USB device when the vehicle is turned off. If the ignition is turned on while the USB device is connected, the device may become damaged or may not operate normally in some cases.

Caution

USB storage devices can only be connected to this product for the purpose of playing music files.

The USB port should not be used to charge USB accessory equipment since the heat generation using the USB terminal may cause performance issues or damage to the product.

- Damaged music files may be cut-off during playback or may not be played at all.

iPod®

All audio media types that are supported by the iPod® can be played.

Note
Connecting an iPod® when the infotainment system is off, turns the system on in iPod® mode and plays the track last played on the iPod®.

Main buttons and controls:

Tune/file button

- Rotate **TUNE FILE/PUSH MODE** (7) to scroll through the track list, menu or track information.

Information button

- Press **TEXT** (12) to view available file information for the track being played.

Seek buttons

- Press **SEEK TRACK** (13) to play the previous or next track.
- Press and hold to fast rewind/ fast forward through the currently playing tracks. Release the button to stop seeking.

Preset buttons

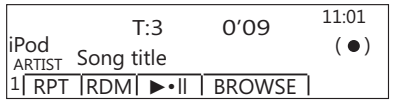
- Press a function button (15) to select the function shown in the display.

Connecting an iPod®

1. Open the cover (11) to access the USB/AUX port.
2. Connect the iPod® using the USB cable supplied with the iPod®, and a Micro-USB adaptor lead, to the USB port.

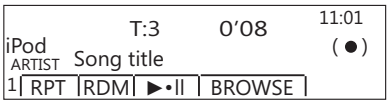
- The iPod® is automatically detected by the system.

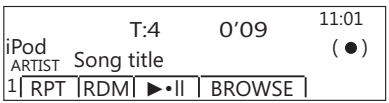
  Reading is displayed.



- During playback, repeat, random, play, pause and browse functions are displayed.

Previous/next track

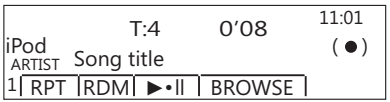


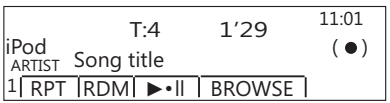


To play the previous or next track:

- Press **SEEK TRACK** (13) during play.
- Alternatively, press △ or ▽ on the steering wheel remote controls.

Fast rewind/reverse





1. Press and hold **SEEK TRACK** (13) during play to rewind or fast-forward through a track.
2. Release the button to resume playing at normal speed.

   The elapsed time is displayed.

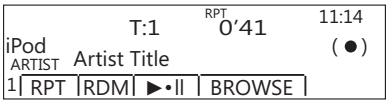
   Alternatively, press and hold △ or ▽ on the steering wheel remote controls.

File information

1. Press **TEXT** (12) to view available file information for the track being played.
2. Press again to display available information for the track.

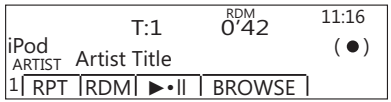
   Note
   If ▶ displays at the end of the information, press the function button (15) below PAGE to view additional text.

Repeat



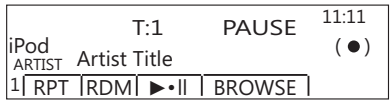
- Press the function button (15) below RPT to turn repeat mode on or off.
- RPT is displayed.
- The current track is repeated.

Random



- Press the function button (15) below RDM to turn random mode on or off.
- When A.RDM is displayed, all tracks in the current selection are played.
- When RDM is displayed, all tracks are played randomly.

Pause



1. Press the function button (15) below ►•II.

   PAUSE is displayed.
2. To resume playback, press the button again.

Search

1. Press a function button (15) below BROWSE.

2. Rotate **TUNE FILE/PUSH MODE** (7) to scroll through the menu.

   Select from Playlists, Artists, Albums, Songs, Podcasts, Genres, Composers and Audiobooks.
3. Press **TUNE FILE/PUSH MODE** (7) to make selections.
4. Press the function button (15) below BACK to return to the previous screen.

USB port

General information

A USB stick can be connected to the USB port.

The USB AUX port (11) is located on the infotainment system.

Main buttons and controls:

Tune button with control

- Rotate **TUNE FILE/PUSH MODE** (7) to scroll through the track list, menu or MP3/WMA track information.

USB AUX button

- Press **USB AUX** (10) when a USB device is connected to select USB play mode.

USB AUX port

- Open the cover (11) to access the port.

Information button

- Press **TEXT** (12) to view file information for the track being played.

Seek buttons

- Press **SEEK TRACK** (13) to play the previous or next track.
- Press and hold to fast rewind/ fast forward through the currently playing tracks. Release the button to resume playing at normal speed.

Preset buttons

- Press a function button (15) to select the function shown on the display.

Connecting a USB device

1. Open the cover (11) to access the port.
2. Connect the USB device, containing music files, to the USB port using a Micro-USB adapter lead.

Note

- Once reading of the USB device is complete, it will play automatically.
- If a non-readable USB device is connected, an error message will be displayed and the previously used mode will play.
- If the USB device to be played is already connected, press **USB AUX** (10) to select USB. Play will begin from where it previously finished.

Using the USB menu

The USB menu operation is similar to the CD/MP3 menu operation.

See Using the CD menu on page 93.

Disconnecting a USB device

- Press the **FM AM** (17) or **DISC** (16) to select another mode.

  Note
  Disconnect the USB device when the vehicle is turned off. If the ignition is turned on while the USB device is connected, the device may become damaged or may not operate normally in some cases.

AUX input

1. Open the cover (11) to access the USB/AUX port.
2. Connect an auxiliary device using a 3.5 mm audio jack cable.

Main buttons and controls:

USB AUX button

- Press **USB AUX** (10) when an AUX device is connected to select AUX input mode.

Volume/power button

- Rotate **VOL/PWR** (1) to adjust the volume.

Tune/file button

- Press **TUNE FILE/PUSH MODE** (7) to adjust or select the sound setup mode.

See Tone settings on page 84.

Bluetooth® phone

General information

Bluetooth® allows users with a Bluetooth® enabled mobile phone to make and receive hands-free calls using the vehicle's infotainment system and controls.

It is not possible to listen to music through Bluetooth® audio. Devices must be connected through the USB AUX port (11).

The Bluetooth® enabled mobile phone must be paired to the vehicle's infotainment system before it can be used in the vehicle.

Not all phones will support all functions. For more information visit: www.holden.com.au.

The following symbols may be displayed at the top of the infotainment screen:

: Bluetooth® device connected

: Mobile phone signal strength

⚠Warning

Do not use a mobile phone when driving.

Make sure that Bluetooth® is activated before driving. If not stop at a safe place to use a mobile phone.

Main buttons and controls:

Phone button

- Press **PHONE** (14) to select Bluetooth® phone mode.
- Press **PHONE** (14) again to exit phone mode.
- Alternatively, press on the steering wheel remote controls.

Menu button

- Press **MENU** (9) to switch between Dialing and Bluetooth® menus.

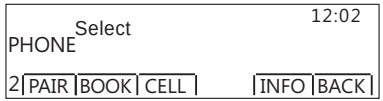
See Overview on page 82.

Phone menu

- Press the function button (15) below the required function:
  PAIR: See Pairing a Bluetooth® device on page 104.
  BOOK: This feature is not supported.
  CELL: Displays information on the connected device.
  INFO: Displays Bluetooth® phone system information.

Pairing a Bluetooth® device

1. Press **PHONE** (14) to select Bluetooth® phone.



2. Press **MENU** (9) to select Bluetooth Menu.
3. Press the function button (15) below **BT** to view available functions.
4. Press the function button (15) below **PAIR** to register the phone to the system.
5. Set up the Bluetooth® device to be connected from the Bluetooth® Menu to enable other devices to search for the Bluetooth® device:
6. Search for Holden on the Bluetooth® device to be connected and initiate the pairing process on the device.

   Note
   Only one Bluetooth® device can be paired to the infotainment system at one time.
7. Enter the Passkey code displayed on the infotainment screen, into the device if prompted.

   Completed! is displayed when pairing is successfully completed.
8. Press **PHONE** (14) to exit.

   Note
   If connection is unsuccessful, try again. If it still does not work, reinstall the phone battery and reconnect.

To delete a device:

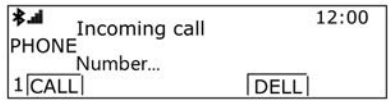
1. Press **PHONE** (14).
2. Press the function button (15) below **BT**.
3. Press the function button (15) below **CELL**.
4. Press the function button (15) below **DEL**.
5. Press the function button (15) below **YES**.

To change the code (passkey):

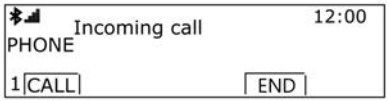
1. Press **PHONE** (14).
2. Press **MENU** (9) to view **BT** on the display.
3. Press the function button (15) below **BT** to view Select Menu.
4. Press the function button (15) below **INFO** to view device information.
5. Press the function button (15) below **EDIT** to view the Passkey edit screen.
6. Rotate **TUNE FILE/PUSH MODE** (7) to change the number.
7. Press the function button (15) below <**CURSOR**>.
8. Press the function button (15) below **SAVE**.

Hands free phone

Receiving calls



1. Connect the Bluetooth® device.
   See Bluetooth® phone on page 103.



When receiving a phone call, the phone will ring and information may be displayed.

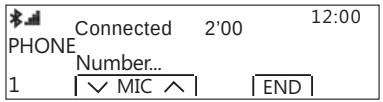
Note

The ringtone may be transferred to the vehicle speakers, depending on the model of mobile phone.

The ringtone volume is adjustable by rotating VOL (1) while ringing.

2. Press on the steering wheel remote controls or press the function button (15) below **CALL** to answer the call.

Ending calls

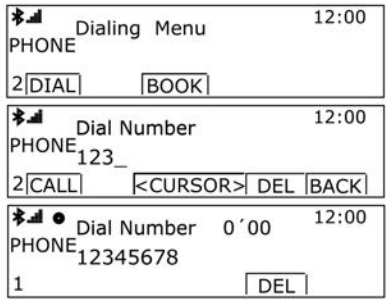


- To hang up, press **PHONE** (14) or press the function button (15) below END or press on the steering wheel remote controls.

Transferring calls

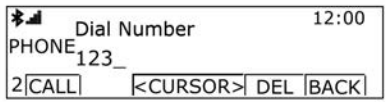
- To transfer to private mode, use the functions on the phone.
- To transfer back to hands free mode, press **PHONE** (14) or on the steering wheel remote controls.

Making calls



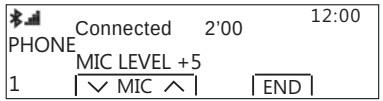
1. Press **PHONE** (14) or press on the steering wheel remote controls.
2. Press the function button (15) below DIAL.
3. Rotate **TUNE FILE/PUSH MODE** (7) to select a number.
4. Press **TUNE FILE/PUSH MODE** (7) to make a selection.
5. Repeat Steps 3 and 4 to enter the entire number.
6. Press the function button (15) below CALL to dial the number.

Editing numbers



1. Press the function button (15) below <CURSOR> to select the number to be changed.
2. Press the function button (15) below DEL or select and delete by rotating then pressing **TUNE FILE/PUSH MODE** (7).

Microphone adjustment



- To adjust the microphone level during a call, press the function button (15) below ∨ MIC ∧.
- Press ∨ or ∧ to adjust the level between -5 and +5.

Climate control

Climate control systems 108
Air vents..... 114
Maintenance 114

Climate control systems

Air conditioning system

⚠Danger

Do not sleep in a vehicle with the air conditioning or heating system on. It may cause serious harm or death due to a drop in the oxygen level and/or body temperature.

Controls

- Heated rear window
- Fan speed
- Cooling
- Air distribution
- Temperature
- Air recirculation

Heated rear window

The vehicle may have a heated rear window.

- Press .

The heated rear window:

- Operates when the ignition is turned on.
- Switches off automatically after a few minutes or by pressing again.
- The LED illuminates.

Caution
Do not use sharp objects or abrasive window cleaners on the rear window. Do not scratch or damage the wires.

Fan speed

- Rotate the fan speed switch to the required speed.

Air distribution

- Select an air outlet by rotating the switch.

  Air is directed:

  : To the instrument panel vents

  : To the instrument panel vents and floor vents

  : To the floor vents

  : To the windscreen vents and floor vents

  : To the windscreen vents

Temperature

- Rotate the temperature switch:

  Red: warm

  Blue: cold

Cooling

The air conditioning system cools and dehumidifies (dries) the air when the outside temperature is a little above the freezing point, therefore condensation may form and drip from under the vehicle.

Note

If no cooling or drying is required, switch the cooling system off to save fuel.

1. Start the engine.
2. Rotate the temperature switch to cold air.
3. Rotate the fan speed switch to the required speed.
4. Press .

   The LED illuminates when the air conditioning is on.
5. Rotate the air distribution switch to the required setting.

To turn the air conditioning system off:

- Rotate the fan speed switch ✻ to **0** or press ☼.
  The LED extinguishes when the air conditioning is off.

Air recirculation

- Slide the switch to ⟲.

⚠Warning

Driving with recirculation mode on for a prolonged period of time can make you sleepy. Periodically switch to outside air mode for fresh air.

The exchange of fresh air is reduced in air recirculation mode. In operation without cooling, the air humidity increases, so the windows may mist up. The quality of the passenger compartment air deteriorates, which may cause the vehicle occupants to feel drowsy.

Maximum cooling

Use maximum cooling for quick cooling of the passenger compartment.

1. Turn the ignition on.
2. Briefly open the windows so that hot air can disperse quickly.
3. Slide the air recirculation switch to position ⟲.
4. Rotate the air distribution switch to ⇶.
5. Rotate the temperature switch to cold air.
6. Rotate the fan speed switch ✻ to maximum speed.
7. Press ☼
8. Open the air vents.

Electronic climate control system

⚠Danger

Do not sleep in a vehicle with the air conditioning or heating system on. It may cause serious harm or death due to a drop in the oxygen level and/or body temperature.

Controls

- The electronic climate control system operates in automatic mode when **AUTO** is pressed.

All settings, except temperature are chosen automatically by the system.

- Select a temperature while in automatic mode.

Automatic mode

1. Press **AUTO**.
2. Open all air vents.

3. Select a temperature by rotating the central switch.

   Anticlockwise: cold

   Clockwise: warm

   Note
   If the minimum temperature is set, the electronic climate control system operates at maximum cooling.

Manual mode

Pressing any of the following buttons deactivates automatic operation.

To return to automatic mode:

- Press **AUTO**.

Fan speed

To increase or decrease the fan speed:

- Press **+** or **–**.

  The fan speed is shown on the display.

Air distribution and cooling

To select an air distribution outlet:

- Press △ or ▽.

  The setting is shown on the display.

  Air is directed:

  : To the instrument panel vents

  : To the instrument panel vents and floor vents

  : To the floor vents

  : To the windscreen vents and floor vents

To select cooling:

The air conditioning system cools and dehumidifies (dries) the air when the outside temperature is a little above the freezing point, therefore condensation may form and drip from under the vehicle.

If no cooling or drying is required, switch the cooling system off to save fuel.

- Press ☼ to turn on and off.

  The LED illuminates when the air conditioning is on.

Demisting and defrosting windows

For windscreen demisting:

1. Press .

   Air distribution and fresh air are set automatically.

   The LED illuminates.

2. To return to the previous mode, press , or press **AUTO** to return to automatic mode.

For rear window demisting:

- Press .

  The LED illuminates when the rear window demister is on.

Caution

Do not use sharp objects or abrasive window cleaners on the rear window.

Do not scratch or damage the wires.

Air recirculation

- Press .

  The LED illuminates when air recirculation is on.

- To return to fresh air, press .

  The LED illuminates when the fresh air is on.

⚠Warning

Driving with recirculation mode on for a prolonged period of time can make you sleepy. Periodically switch to outside air mode for fresh air.

The exchange of fresh air is reduced in air recirculation mode. In operation without cooling, the air humidity increases, so the windows may mist up. The quality of the passenger compartment air deteriorates, which may cause the vehicle occupants to feel drowsy.

Air vents

Adjustable air vents

- Direct air flow by tilting the vents.
- To close the vent, push the slat down.

- Direct air flow by tilting the vents.

⚠Warning

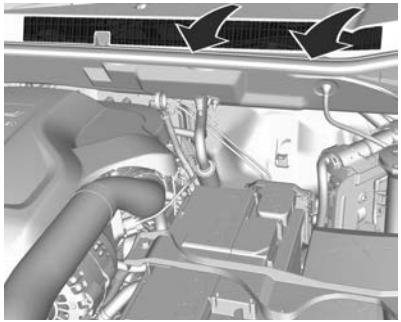
Do not attach objects to the vents. Damage or injury may occur.

Fixed air vents

Fixed air vents are located beneath the windscreen, front door windows and in the footwells.

Maintenance

Air intake



Outside air is drawn into the vehicle through the opening between the bonnet and the windscreen.

Keep the area clear of debris.

Air conditioning regular operation

To ensure efficient performance, switch the cooling on for a few minutes once a month, even in winter.

Driving and operating

Driving information..... 115
Starting and operating 115
Automatic transmission 121
Manual transmission..... 124
Brakes 129
Ride control systems 131
Fuel..... 135
Towing 139
Conversions and add-ons..... 143

Driving information

Before entering the vehicle

Check that windows, mirrors and lamps are clean.

Visually check tyre inflation. Check tyre pressures weekly.

Before driving off

1. Close and secure all doors.
2. Position the seat for comfortable driving.
3. Adjust rear view mirrors.
4. Fasten seat belts.
5. Check that warning indicators illuminate when turning the ignition on. See Warning lights, gauges and indicators on page 57.

Starting and operating

New vehicle running-in

Use the following precautions to improve performance:

- Do not make full throttle starts.
- Avoid downshifting to brake or slow the vehicle.
- Avoid hard stops except in emergencies. This will allow your brakes to bed in properly.
- Avoid hard stops except in emergencies to avoid premature wear and early replacement of brakes.
- Avoid heavy acceleration and prolonged high speed driving to avoid damage to the engine and to conserve fuel.
- Do not tow any other vehicle.

Driving diesel engine vehicles

Observe the following precautions to ensure maximum turbocharger service life.

- After starting the engine, let it run for approximately 1 to 2 minutes while idling (avoid acceleration or driving the vehicle).
- Do not stop the engine immediately after high load driving (such as high speed driving or driving up steep slopes). Let the engine run for approximately 1 to 2 minutes at idle speed to cool it down.
- After changing the engine oil and oil filter, start the engine and let it run for about 1 to 2 minutes while idling (avoid acceleration or driving the vehicle).
- Operate the engine above idle only after normal engine oil pressure has been established. Forcing the turbocharger to operate before the bearings are adequately lubricated creates unnecessary friction.
- Use only the specified engine oil and observe inspection and replacement intervals.
- At low outside temperatures or when the vehicle has not been used for a long period, normal engine oil pressure and flow is affected.

  Under these conditions the engine should be started and allowed to idle for a few minutes before operating at higher rpm.

Brakes

- Do not let the vehicle run down hills, or coast with the engine off, as the power assistance does not operate.
- Ensure that there are no obstructions which could limit brake pedal use.
- Continuous or heavy use of brakes will shorten the life of the brake pads.
- See Antilock Brake System (ABS) on page 129.

Off-road driving

Before driving off-road:

- Check the fuel level. See Fuel on page 135.
- Check spare tyre pressure. See Tyre pressure on page 192.
- Check fluids levels. See Engine compartment overview on page 149.

While driving off-road:

- Be alert to unexpected restrictions.
- Be aware of uncommon noises from the tyres and the engine.
- Always drive at a speed at which you are able to maintain control the vehicle.

⚠Warning

When driving off-road, sudden motions and manoeuvres could lead to loss of control of the steering and possible personal injuries. When driving on and off road, always wear a seat belt.

After driving off-road:

- Remove any debris from under the vehicle or bonnet. It may become a fire hazard.
- After driving through mud or sand, clean and check the brake linings.
- Check the body frame, steering, suspension, wheels, tyres, exhaust system, fuel lines and cooling system.

Note

Regular off-road driving requires more frequent maintenance.

Water crossing

Before crossing water:

- Switch off the air conditioning.
- Do not attempt to drive through water more than 600 mm deep.
- Never drive into fast running water. The force of the water can easily move the vehicle sideways, possibly into deeper water.
- Drive very slowly through deep water. Driving too fast may cause water to enter the engine and cause major damage.
- Immediately after driving through deep water, drive slowly and check the brake pedal force.

  If the brakes are wet, press firmly several times to dry them out quickly.
- If the vehicle is stationary in deep water for an extended time, water may have entered the engine, transmission, differentials and wheel bearings. Contact a Holden Dealer as soon as possible.

Hill and mountain roads

If the vehicle is driven frequently over hilly terrain, it must always be in good condition. The fluids, tyres and brake pads must be checked according to the maintenance schedule shown in the Service/ Warranty Booklet.

On a downhill road, avoid unnecessary use of the brakes. The vehicle speed can be slowed by shifting down a gear.

When driving downhill, always keep the engine running and a gear engaged. Do not drive with the engine turned off or by shifting into neutral gear.

Loose articles

Do not leave loose articles or luggage in the passenger compartment. Secure in the rear load area.

⚠Warning

Portable gas cylinders can leak, creating a risk of fire or explosion.

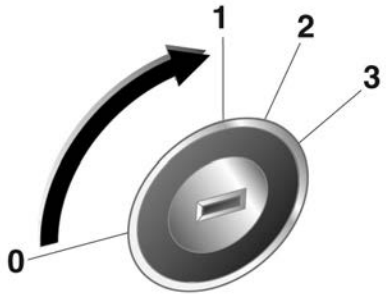
As a precaution, ensure adequate ventilation when carrying gas cylinders.

They must be restrained from rolling around and where possible, placed in the rear load compartment of the vehicle.

It is recommended that if gas cylinders are frequently transported that a purpose-built carrying compartment be used.

Ensure any transportation of gas cylinders complies with the applicable regulations.

Ignition positions



⚠Warning

Do not turn the engine off while the vehicle is moving as there will not be any power assist for brakes or steering.

Never remove the key while the vehicle is moving, as this will lock the steering.

0: (LOCK) The key can only be inserted and removed from this position.

1: (ACC) When the key is in this position, the audio system operates.

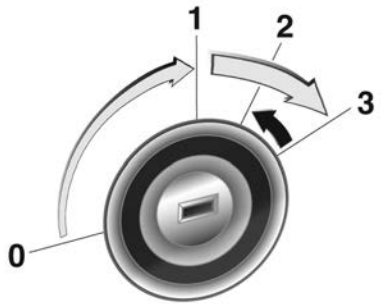
2: (ON) Diesel engine preheating. When the key is in this position, the engine is ready to start and all electrical systems are active.

3: (START) Turn the key to this position until the engine starts.

Caution

Do not leave the key in positions 1 or 2 for a long time, unless the engine is running, otherwise the vehicle's battery will discharge.

Starting the engine



1. Apply the park brake.
2. Turn the key to position 1 while moving the steering wheel slightly to release the lock.

   Manual transmission: Push the clutch pedal to the floor and move the shift lever to the neutral position.

   Automatic transmission: Move the shift lever to **P** or **N**.

   Do not accelerate.
3. Turn the ignition key to position 2 until ⟅ extinguishes.
4. Turn the key to position 3 and release when the engine is running.

Retained Accessory Power (RAP)

The power outlets may be used after the engine is turned off.

Note
The power outlets will continue to operate for up to 10 minutes or until a door is opened.

See Power outlets on page 56.

Parking

1. Apply the park brake.
2. Automatic transmission: Select position **P**.

   Manual transmission: If facing uphill or on flat ground, select 1st gear. If facing downhill, select reverse gear.

   On an uphill slope, turn the front wheels away from the kerb.

   On a downhill slope, turn the front wheels towards the kerb.
3. Shut all windows.
4. Turn the ignition off to lock the steering wheel.
5. Remove the key.
6. Press on the key to lock all doors. See Keys and locks on page 16.

⚠Warning

To avoid the possibility of injury, always apply the park brake before exiting the vehicle.

Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with the hot exhaust system.

Never leave the engine running in an area such as a closed garage or underground car park.

Engine exhaust

⚠Danger

Engine exhaust gases contain poisonous carbon monoxide, which is colourless and odourless and could be fatal if inhaled.

If exhaust gases enter the interior of the vehicle, open the windows. Have the cause of the fault repaired by a Holden Dealer.

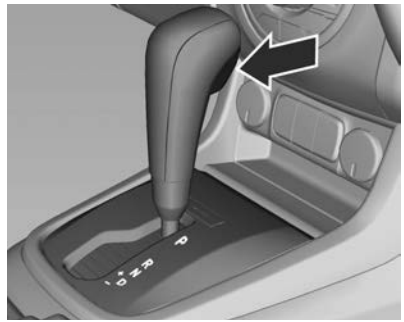
Automatic transmission

The automatic transmission allows manual gear shifting (manual mode) or automatic gear shifting (automatic mode).

Transmission display

The selected gear or transmission mode is displayed in the Driver Information Centre (DIC).

Shift lever positions



P: (park) In park position, the wheels are locked. Select **P** only when the vehicle is stationary and the park brake is applied.

R: (reverse) Place in reverse only when the vehicle is stationary.

N: (neutral)

D: (drive) Used for general driving. Allows the transmission to be shifted into any of the six forward gears.

+-: (manual) See Manual mode on page 122.

Note

- The shift lever is locked in position **P**. To move, switch the ignition on, apply the brake pedal and push the release button.
- To engage **P** or **R**, push the release button.
- To start the engine, press the brake pedal while in either **P** or **N**.
- Do not accelerate while engaging a gear.
- Never depress the accelerator pedal and brake pedal at the same time.
- When a gear is engaged, the vehicle slowly begins to creep when the brake is released.

Engine braking

To utilise the engine braking effect, select a lower gear when driving downhill.

⚠Warning

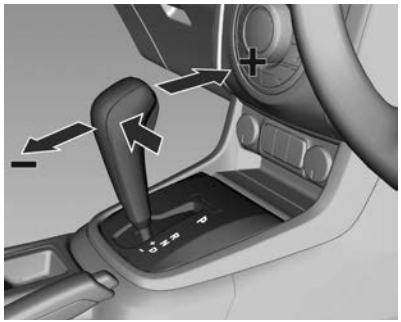
Do not downshift by two or more gear positions at one time.

Parking

1. Press the brake pedal.
2. Select position **P**.
3. Pull the park brake lever up firmly.
4. Remove the ignition key.

   Note
   The ignition key can only be removed when the shift lever is in position **P**.

Manual mode



To enable manual mode, move the shift lever to position **D** then push the lever to the left.

- Push the lever forwards (+) once to shift up one gear.
- Pull the lever backwards (-) once to shift down one gear.

Note

- If a higher gear is selected when vehicle speed is too low, or a lower gear when vehicle speed is too high, the shift is not executed.

  Shift Denied is displayed on the DIC.
- If engine speed is too low, the transmission automatically shifts to a lower gear.
- No automatic shifting to a higher gear takes place at high engine speed.

Electronic driving programmes

Kickdown

If the accelerator pedal is pressed to the floor while in automatic mode, the transmission shifts to a lower gear, depending on the engine speed.

Fault

In the event of a fault, illuminates. The transmission no longer shifts automatically or manually because it is locked in a certain gear.

Contact a Holden Dealer.

Interruption of power supply

If the power supply is interrupted, the shift lever cannot be moved out of position **P** and the ignition key cannot be removed.

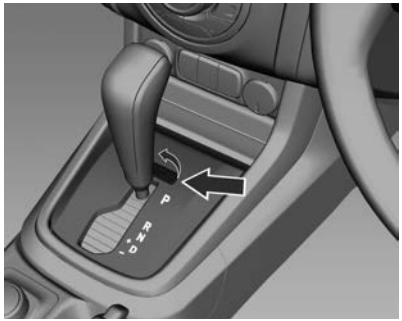
If the battery is discharged, start the vehicle using jump leads. See Jump starting on page 177.

If the battery is not the cause of the fault, release the shift lever and remove the ignition key from the ignition switch/lock.

Release shift lever

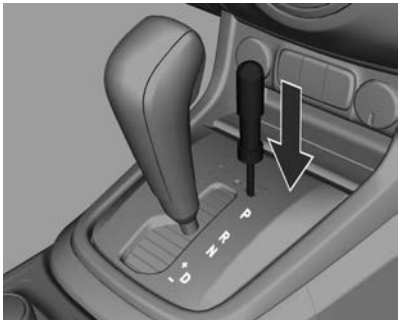
To shift out of **P**:

1. Apply the brake pedal.



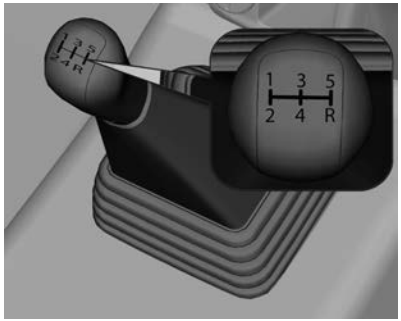
2. Open the cover.

   Note
   Use a small screwdriver to prise the cover off, at both ends.



3. Insert a screwdriver into the slot until the shift lever is unlocked.
4. Move the shift lever to position **N**.
5. Remove the screwdriver.
6. Close the cover.
7. Have the vehicle repaired by a Holden Dealer as soon as possible.

Manual transmission



- To engage reverse gear, move the shift lever towards the right side and rearwards.
- Do not engage reverse gear while the vehicle is moving.
- If the gear does not engage, move the shift lever to neutral, release the clutch pedal, press the clutch pedal again then repeat gear selection.

- Ensure the clutch pedal is completely pushed to the floor.
- Do not use the pedal as a foot rest.

Caution
Do not drive with your hand resting on the shift lever.

Drive systems

Four-Wheel Drive

The vehicle may have Four-Wheel Drive.

- Four-Wheel Drive sends the engine's driving power to all four wheels for extra traction.
- Use **2**△ (Two-Wheel High) for normal driving on sealed roads.
- Do not use Four-Wheel Drive for normal driving on dry pavement.

Note

- Driving on clean, dry roads in Four-Wheel Drive for an extended period of time can cause premature wear on the vehicle's powertrain.
- Never use Four-Wheel Drive when a different spare tyre size is installed on the vehicle. The vehicle could be damaged and the repairs may not be covered by the New Vehicle Voluntary Warranty.

Indicator lights:

- All lights illuminate on the shift control switch when the ignition is turned on.

  If the lights do not come on, contact a Holden Dealer.
- Illuminate on the shift control switch to indicate the current setting.
- Flash while shifting. The light will illuminate when the shift is completed.

  If the shift control switch does not shift, it will return to the last setting.

Transfer case shift control switch

The switch may be located in front of the shift lever or next to the park brake on the centre console.

Rotate the switch to shift into and out of Four-Wheel Drive.

- **2**△ (Two-Wheel High): Use for driving in most street and highway situations.

  The front axle is not engaged in Two-Wheel Drive.
- **N** (Neutral): Use only when the vehicle is being towed.
- **4**△ (Four-Wheel High): This setting engages the front axle to help drive the vehicle.

  Use Four-Wheel High when you need extra traction, such as on snowy or icy roads, or in most off-road situations.
- **4**▽ (Four-Wheel Low): This setting engages the front axle to provide extra traction.

  It sends maximum power to all four wheels.

  Use Four-Wheel Low if driving off-road in sand, mud or deep snow and while climbing or descending steep grades.

  Shifting into Four-Wheel Low will turn Electronic Stability Control (ESC) off.

  See Electronic Stability Control (ESC) on page 132.

Note

- ESP Off is displayed on the DIC.
- OFF illuminates on the instrument panel.

Shifting from Two-Wheel High to Four-Wheel High

- Rotate the shift control switch from **2**△ to **4**△.

  This can be done at any speed below 120 km/h.

  The front axle will lock automatically.

Shifting from Four-Wheel High to Two-Wheel High

- Rotate the shift control switch from **4**△ to **2**△.

  This can be done at any speed.

  The front axle will unlock automatically.

Note
It is normal to hear and feel the vehicle's transfer case shift out of **4**△.

Shifting from Two-Wheel High or Four-Wheel High to Four-Wheel Low

The vehicle must be stationary or moving less than 5 km/h and the transmission in **N** (automatic transmission) or the clutch pedal pressed (manual transmission).

The preferred method for shifting into **4**▽ is to have the vehicle moving 1.6 to 3.2 km/h.

1. Rotate the shift control switch to **4**▽.
2. Wait for the **4**▽ indicator light to stop flashing and to illuminate before shifting the transmission into gear or releasing the clutch pedal.

   If **4**▽ is selected when the vehicle is in gear and/or moving faster than 5 km/h, the **4**▽ indicator light will flash for 30 seconds but will not complete the shift.

   The light will return to the original setting.

Shifting from Four-Wheel Low to Two-Wheel High or Four-Wheel High

The vehicle must be stationary or moving less than 5 km/h and the transmission in **N** (automatic transmission) or the clutch pedal pressed (manual transmission).

The preferred method for shifting out of **4**▽ is to have the vehicle moving 1.6 to 3.2 km/h.

1. Rotate the shift control switch to **2**△ or **4**△.
2. Wait for the **2**△ or **4**△ indicator light to stop flashing and illuminate before shifting the transmission into gear or releasing the clutch pedal.

   If **2**△ or **4**△ is selected when the vehicle is in gear and/or moving faster than 5 km/h, the **2**△ or **4**△ indicator light will flash for 30 seconds but will not complete the shift.

   The light will return to the original setting.

Shifting to neutral

Use **N** (neutral) when towing the vehicle. See Towing the vehicle on page 179.

⚠Warning

Shifting the shift control switch to **N** can cause the vehicle to roll even if the transmission is in position **P** (park). Serious injuries could occur. Make sure the park brake is applied before placing the shift control switch to **N**. See Park brake on page 130.

1. Stop the vehicle.
2. Apply the park brake.
3. Start the vehicle.
4. Press the brake pedal.
5. Shift the transmission to **N** (automatic transmission) or press the clutch pedal (manual transmission).
6. Rotate the shift control switch to **2**△.
7. Rotate the shift control switch clockwise past **4**△ to **N**.

   Note
   N only displays when selected.
8. Hold the switch at **N** (approximately 20 seconds) until the red **N** indicator light illuminates, when the shift to **N** is complete.

   Note
   When releasing the shift control switch from **N**, the switch will rotate to the Four-Wheel Low **4**▽ setting. The shift control switch will remain in **N** with the red indicator light illuminated until a new setting is selected.
9. Press and hold the brake pedal.
10. Shift the transmission to **R** for 1 second.
11. Shift the transmission to **D** (automatic transmission) for 1 second or **1** (manual transmission).
12. Release the clutch to ensure the shift control switch is in **N** (manual transmission).

    If the shift control switch is not in **N**, repeat from Step 4.
13. Turn the ignition key to ACC (position 1).
14. Place the shift lever into **P** (automatic transmission) or **1** (manual transmission).
15. Turn the ignition key to LOCK/OFF (position 0).

    Note
    This neutral setting is a Two-Wheel Drive neutral, so the front and rear outputs of the transfer case are disengaged as though in Two-Wheel High.

    With a disengaged front axle, there is no power to the front wheels, thus allowing towing with the front wheels off the ground.

Shifting out of neutral

After towing the vehicle, shift out of **N** (neutral) to drive.

1. Apply the park brake.
2. Press the brake pedal.
3. Start the engine or keep the engine off and turn the ignition key to ON (position 2).
4. Move the shift lever to **N**.
5. Press the clutch pedal (manual transmission).
6. Rotate the shift control switch from **4**▽ to another setting.
7. Release the park brake.

Brakes

The brake system comprises two independent brake circuits.

If one brake circuit fails, the vehicle can still be braked using the other brake circuit. However, braking effect is achieved only when the brake pedal is pressed firmly. Considerably more force is needed for this.
The braking distance is extended. Contact a Holden Dealer.

When the engine is not running, such as when the vehicle is being towed and the brake pedal has been depressed once or twice, braking requires greater force.

Caution

Do not drive with your foot resting on the brake pedal. This will accelerate wear of the brake components and cause the brakes to become overheated.

Antilock Brake System (ABS)

The ABS:

- Continuously monitors the vehicle's braking system preventing the wheels from locking up.
- Allows maximum braking effort while full steering control is retained, even in the event of panic braking.

⚠Warning

Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style. The vehicle's speed should always be adjusted to suit road and traffic conditions.

Operation

ABS operation is noticeable by pulsing of the brake pedal and the noise of the regulation process.

The initial self-check may also be audible.

Keep the brake pedal fully pressed throughout the braking process, without pumping it. Pumping the brake pedal can reduce brake efficiency.

Caution

When the ignition is turned on, (ABS) is illuminated for a few seconds.

If (ABS) does not extinguish, or illuminates when driving, a malfunction has occurred.

Note The vehicle's brake system remains operational, but without ABS assistance. Have a Holden Dealer check the system as soon as possible.

See Brake system warning light on page 63.

Park brake

Applying the park brake:

1. Pull the lever straight up, without pressing the release button.

Releasing the park brake:

1. Pull the lever slightly upwards.
2. Press the release button and lower the lever all the way down.

To reduce the operating forces of the park brake, depress the foot brake at the same time.

⚠Warning

Never drive the vehicle with the park brake applied.

See Brake system warning light on page 63.

Brake assist

If the brake pedal is pressed quickly and forcefully, maximum brake force is automatically applied (full braking).

Maintain steady pressure on the brake pedal for as long as full braking is required. Maximum brake force is automatically reduced when the brake pedal is released.

Ride control systems

Traction Control System (TCS)

TCS improves driving stability when necessary, regardless of the type of road surface or tyre grip, by preventing the driving wheels from spinning.

As soon as the driving wheels start to spin, engine output is reduced and the wheels are braked individually. This considerably improves the driving stability of the vehicle on slippery road surfaces.

When Four-Wheel-Drive is active, TCS is operational on the rear wheels only.

⚠Warning

Do not let this special safety feature tempt you into taking risks when driving.

Adapt speed to road conditions.

Operation

The TCS switch may be located in front of the shift lever or beneath the instrument panel, on the right side.

In certain circumstances, it may be helpful to deactivate the TCS.

- Deactivate by pressing OFF for approximately 2 seconds.

  Traction Control Off is displayed on the DIC.

- TCS is reactivated by pressing OFF again, for approximately 2 seconds.

  Traction Control On is displayed on the DIC.

- When active flashes.
- TCS is also reactivated the next time the ignition is turned on.
- See Ride control systems on page 70.

Electronic Stability Control (ESC)

The ESC:

- Improves driving stability in any driving situation.
- Assists in maintaining vehicle stability when the vehicle's grip level is exceeded such as a sudden lane change, slippery or unexpected road conditions.
- Alters engine power and/or braking on specific wheels, improving the vehicle's steering control and power delivery, on wet or slippery roads, particularly on snow and ice.

⚠Warning

Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style. The vehicle's speed should always be adjusted to suit road and traffic conditions.

Operation

The ESC switch may be located in front of the shift lever or beneath the instrument panel, on the right side.

In certain circumstances, it may be helpful to deactivate the ESC.

- Deactivate by pressing OFF for approximately 7 seconds.

  OFF illuminates and ESP Off is displayed on the DIC.

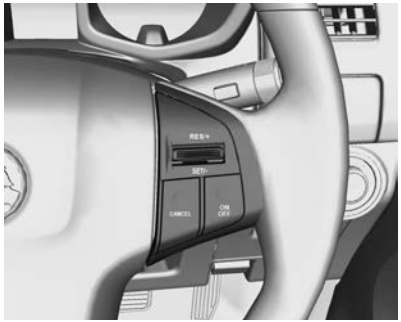
- The ESC is reactivated by pressing OFF again for approximately 2 seconds.

  Both TCS and the ESC are reactivated.
- When active illuminates.
- The ESC is also reactivated the next time the ignition is turned on.

  See Ride control systems on page 70.

Cruise control

The vehicle may have cruise control.



The cruise control:

- Maintains the vehicle's speed without pressure on the accelerator pedal.
- Will only operate at speeds above approximately 40 km/h.
- Controls are located on the steering wheel.
- For safety reasons, cruise control cannot be activated until the foot brake has been operated once.

⚠Warning

Do not use the cruise control when road or driving conditions require varying speeds. A consistent speed isn't practical in heavy, varying traffic or on winding, slippery or rough roads.

The cruise control does not apply the vehicle's brakes. Therefore the vehicle may gain speed when going down steep hills.

When climbing steep hills it is possible for the vehicle to lose speed. You may need to switch off the cruise control and use the accelerator pedal.

Setting cruise control

1. Press **ON OFF**.

   illuminates white.
2. Accelerate to the desired speed (above 40 km/h).
3. Push the switch down to **SET/-**.

   illuminates green.
4. Take your foot off the accelerator pedal.

Increasing set speed

- Push the switch up to **RES/+** and hold it or briefly push to **RES/+** repeatedly.

  The vehicle will accelerate.
- Alternatively accelerate to the desired speed and store by pushing the switch down to **SET/-**.

Note
Vehicle speed can be increased by depressing the accelerator pedal. When the accelerator pedal is released, the previously stored speed is resumed.

Decreasing set speed

1. Push the switch down to **SET/-** and hold it or briefly push to **SET/-** repeatedly.

   The vehicle will decelerate.
2. Release the switch at the desired speed.

Deactivation

- Press **CANCEL**.

  illuminates white.
- Alternatively, do one of the following:
  - Reduce vehicle speed below approximately 40 km/h.
  - Press the brake pedal.
  - Press the clutch pedal for more than a few seconds (manual transmission).
  - TCS or the ESC operates.

Resume stored speed

When the cruise control is on and speed is above 40 km/h:

- Push the lever up to **RES/+**.

  The most recently set speed will automatically resume.

  illuminates green.

Switching off

- Press **ON OFF**.

  extinguishes.

  The stored speed is deleted.

Note
Switching the ignition off also deletes the stored speed.

Fuel

⚠Danger

EXHAUST WARNING – CARBON MONOXIDE POISONING

Exhaust gases can produce carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.

Gases could be inhaled if the exhaust system on your vehicle is faulty.

To protect against exhaust gases entering the vehicle, the exhaust system and body should be inspected:

- Each time the vehicle is serviced.
- Whenever a change is noticed in the sound of the exhaust system.
- Whenever the exhaust system, underbody or rear of the vehicle is damaged.

Take the vehicle to a Holden Dealer if you think the vehicle needs inspecting for any of the above reasons.

Do not sit (or leave children or pets) in a parked vehicle for any extended period of time with the engine running. Turn the fan on using any setting that brings outside air into the vehicle. Do not run the engine in an enclosed area (such as the garage) any longer than is needed to move the vehicle.

⚠Danger

Always switch off the engine and any mobile phones when refuelling.

Do not smoke or allow open flames or sparks near the vehicle when refuelling.

If fuel fumes are smelt while driving, the cause should be identified and corrected without delay by a Holden Dealer.

Static electricity can ignite fuel vapour. Only use pumps, hoses and containers that are properly grounded when filling up with fuel.

To avoid injury to you and to others, read and follow all instructions on the petrol station pump.

⚠Warning

USE OF FUEL CONTAINING ETHANOL

Under no circumstances should you use diesel fuel containing ethanol.

Use of such fuels may result in engine malfunction, starting and operating difficulties and materials degradation.

These adverse effects could result in permanent damage to your vehicle and personal injury.

Fuel types

Diesel engines must be operated only on commercially available diesel fuel meeting the requirements of Euro standard EN590.

The use of bio-diesel containing up to 5 % fatty acid methyl ester (“FAME”) also known as “B5” is also permitted provided that the FAME meets the Euro Standard EN14214, and the resultant B5 blend meets Euro Standard EN590.

Do not use marine diesel oils or heating oils.

The flow and filterability of diesel fuel are temperature-dependent. When temperatures are low, use diesel fuel with guaranteed winter properties.

Caution

Use only bio-diesel blends containing up to a maximum of 5 % FAME that meets Euro standard EN590.

Purchasing fuel from a reputable fuel retailer may reduce the risk of purchasing fuel with more than 5 % FAME or fuel which contains abnormal fuel properties.

Use of any other bio-diesel that does not have the certification referred to above, or has a FAME content exceeding 5 %, may cause serious damage to your vehicle (including engine failure).

Damage attributable to the use of non certified bio-diesel is not covered by your New Vehicle Voluntary Warranty. In no event will GM Holden be responsible or bear any liability for any damage or loss that may arise in connection with the use of any fuel that does not meet this specification.

Refuelling

Always fill the fuel tank at the intermediate or fast fill rate. Do not add any more fuel after the fuel filler first clicks off or fuel blows back. This allows room for the fuel to expand inside the tank.

Wipe off any overflowing fuel immediately from the vehicle. Replace the fuel cap and close the fuel opening then spray or splash with water.

Tank capacity

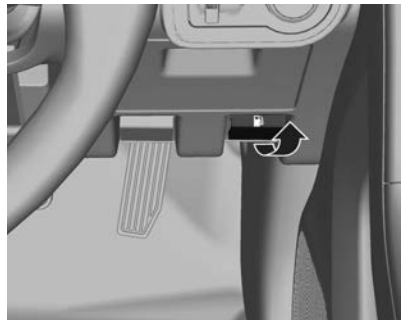
See Capacities on page 190.

Locking fuel cap
(Cab chassis)

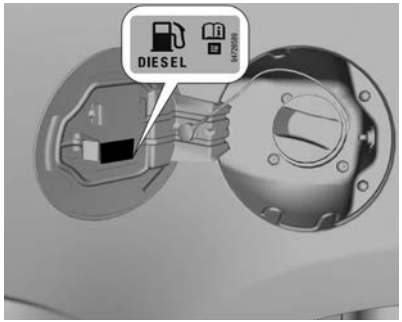
The fuel filler is located at the rear of the vehicle on the left side.

1. To unlock insert the key and rotate anticlockwise.
2. Slowly remove the cap.
3. After refuelling, replace the cap.
4. To lock insert the key and rotate clockwise.

Fuel filler door (Pickup)



1. Pull the release lever.



The fuel filler door is located at the rear side of the vehicle, on the left.

2. Slowly remove the cap.
3. Place the fuel filler cap in the fuel filler door.
4. After refuelling, replace the cap.
5. Wipe off any overflowing fuel immediately.
6. Close the fuel filler door.

Caution

Before entering a car wash, ensure the fuel filler door is closed to avoid damage.

Do not close the fuel filler door when the vehicle is locked.

Towing

Trailer towing

The word trailer is used throughout this section and includes all types of towed vehicles, such as caravans, boat trailers or any other special purpose trailer.

Maximum towing capacities (kg) – braked trailer

	2.5L Diesel	2.8L Diesel
Maximum ball load (kg)	300	350
Maximum towing capacity	3,000	3,500
Gross Combined Mass (GCM)	5,500	6,000

Note

- Exceeding these values could affect the New Vehicle Voluntary Warranty.
- The maximum unbraked towing capacity for all vehicles is 750 kg.
- The GCM is a maximum total for vehicle, payload and braked trailer combined.
- The maximum towing capacity requires the payload to be reduced to ensure GCM is not exceeded. See Carrying capacity on page 191.

Towing

Handling, durability and economy may be affected by towing a trailer.

For mandatory towing equipment, see Towing and loading equipment on page 141.

A Holden Dealer will assist with supply and installation of towing equipment.

Overloading

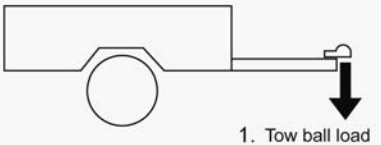
Never exceed the loads given for the towing equipment fitted to the vehicle.

All mandatory equipment must be fitted, otherwise you may affect the New Vehicle Voluntary Warranty, to the extent that Holden considers the overloading or missing equipment to have affected the specifications or quality of the vehicle. See Towing and loading equipment on page 141.

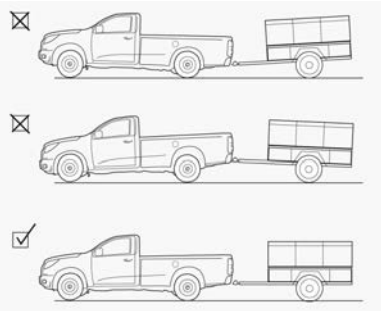
⚠Warning

Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the vehicle arising from the use of such equipment or for loss or injury caused by use of such equipment. The use of such equipment may affect your New Vehicle Voluntary Warranty, to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle. It is inadvisable to mix and match different brands of towing equipment, as equipment is usually designed as an integrated package.

Trailer recommendations



A trailer hitched to a vehicle places a weight on the tow bar. This weight is called the tow bar ball weight or tow ball load (1).



- For single axle trailers, the tow ball load should be 10% of the loaded trailer weight. For heavy trailers with more than one axle, the tow ball load should be 5 % - 10 % of the loaded trailer weight.
- Ensure the tow ball load does not exceed 10% of the loaded trailer weight. Refer to Towing and loading equipment on page 141.
- Adjust by moving items forwards or backwards within the trailer, to change the balance.
- Check the tow ball load before coupling the trailer to the towing vehicle.
- Axle loads must not be exceeded when the tow ball load is included. See Axle loads on page 191.
- If maximum axle loads are exceeded, weight should be removed from the rear of the vehicle.
- If the load balance cannot be corrected, use a load distribution hitch (only for tow bars that support load distribution hitches).

Towing and loading equipment

Tow load	Mandatory equipment
Up to 750 kg	Holden tow bar
	Holden trailer wiring harness
	Load distribution hitch if the vehicle attitude is compromised or the maximum ball load is exceeded*
Between 750 kg and 3,500 kg	Holden tow bar
	Holden trailer wiring harness
	Brakes on the trailer
	Load distribution hitch if the vehicle attitude is compromised or the maximum ball load is exceeded*

*Only for tow bars that support load distribution hitches. Alternatively, redistribute the trailer load.

Load distribution hitch

- A load distribution hitch transfers load to the vehicles front wheels aiding steering and brake performance.
- Do not exceed the maximum towing capacities specified. See Maximum towing capacities on page 139.
- Do not exceed the total front or rear axle loads specified. See Axle loads on page 191.

Towing precautions

- When heavily loading the vehicle or when towing, inflate tyres to the maximum recommended pressure. See Tyre placard on page 170.
- Tighten the tow ball retaining nut to 140 Nm (Newton metres) and check the torque frequently.
- Vehicles handle differently when towing. Take a couple of short distance trips with the trailer before taking a long trip.
- Have the vehicle and trailer correctly maintained and serviced, with particular attention given to the brakes, tyres, suspension, wheel bearings, towing coupling and lighting.
- Use an extended-arm mirror on both sides of the vehicle if necessary.
- If the vehicle has headlamp range adjustment, headlamps may need re-aiming after the loaded trailer has been hitched.
- Use a lower gear and the brakes when descending steep hills.
- Ensure that the tow bar does not obscure the rear number plate. Remove the tow bar tongue when not required for towing.
- The M10 anti-rattle bolt and nut, should be removed when towing to prevent damage to the bolt or tow bar tongue.

Trailer brakes

- Trailer brakes are mandatory on trailers with a trailer mass of more than 750 kg.
- Consult the appropriate regulatory body in your State or Territory for the legal requirements of trailer brakes.

Running-in when towing

It is recommended that a new vehicle be driven for at least 1,500 km before towing.

If towing is necessary before this, do not exceed 80 km/h. This also applies if the vehicle is fitted with a new or reconditioned engine, transmission or rear axle.

Off road loading and towing

To reduce the risk of damage to the vehicle (and trailer) and to improve safety when operating off-road, reduce the vehicle speed and minimise the load being carried or towed.

Vehicle maintenance

More frequent vehicle maintenance is required when using the vehicle to tow. Refer to the Service/Warranty Booklet in the vehicle’s glove box.

Conversions and add-ons

Fitting driving lamps

If driving lamps are to be fitted, it is critical that the Holden approved installation be used. The Holden driving lamps are available from a Holden Dealer and have been compatibility tested with the vehicles design, including the cooling system.

Do not fit any accessory over the upper or lower air intakes at the front of the vehicle, as this may affect engine cooling.

Fitting roo/nudge bars

If a roo/nudge bar is to be fitted, it is critical that the Holden approved roo/nudge bar be used. Other types must not be fitted.

The Holden roo/nudge bar is available from a Holden Dealer and has been compatibility tested with the vehicle's design, including the Holden airbag system.

⚠Warning

Fitting other types of roo/ nudge bars may affect crash performance, airbag performance and engine cooling.

Roo/nudge bars:

- Should not be fitted to vehicles operating in urban areas, as they increase the risk of injury to a pedestrian in the event of a collision.
- Are only recommended for country/outback areas, where additional protection from straying animals is required.

Snorkel intake

It is necessary to reverse the snorkel intake:

- When driving in snowy conditions.
- Where there are other heavy contaminants such as excessive dust or insect swarms.
- To prevent snow or other contaminants from entering the snorkel and engine air intake.

1. Loosen the two screws.
2. Remove the snorkel intake.
3. Rotate the snorkel intake 180º and refit securing the two screws.
4. Once conditions have stopped, refit the snorkel intake to its original position.

Vehicle care

General information 145
Vehicle checks 147
Bulb replacement 158
Electrical system 164
Vehicle tools 169
Wheels and tyres 169
Jump starting 177
Appearance care 182

General information

Where specified, use only Holden genuine parts and accessories.

Emission information

The emission control systems are designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere. HC and NOx, when exposed to sunlight under certain conditions, contribute to photochemical smog. In addition, CO is toxic when it becomes highly concentrated in the air.

Emission control system

Major emission control systems that the vehicle may have are:

1. Evaporative emission control system. This system is designed to prevent the escape of fuel vapour from the fuel system and recycle the vapours through the normal combustion process.
2. Crankcase emission control system. This system is designed to prevent blow-by gases from escaping into the atmosphere and recycle them through the combustion process.
3. Exhaust emission control system. The various components of this system operate collectively to limit HC, CO and NOx emissions in the exhaust gas. The exhaust emission control system consists of components including electronic control of fuel and idle speed. In addition vehicles have a closed loop mixture control system.

It is recommended that service and repair to fuel or emission systems be carried out by an authorised Holden Dealer.

Owner responsibility

The engine, engine control system and exhaust system of the vehicle must NOT be modified in any way.

⚠Warning

Any person who removes, modifies or hinders any part of the emission control system may be contravening Australian Design Rules. It is also illegal to drive a vehicle modified in this way.

Maintenance requirements

Have the vehicle serviced at the frequency shown in the Maintenance schedule, in the Service/Warranty Booklet.

It is recommended that servicing be carried out by an authorised Holden Dealer who will maintain the vehicle's emission control system as per the Service/Warranty Booklet.

Vehicle storage

If the vehicle is to be stored for several months:

- Wash and wax the vehicle.
- Clean and preserve rubber seals.
- Change engine oil.
- Drain the washer fluid reservoir.
- Check coolant and corrosion protection.
- Adjust the tyre pressure to the value specified for a full load.
- Park the vehicle in a dry, well ventilated place.
- Engage first or reverse gear to prevent the vehicle from moving.
- Open the bonnet, close all doors and lock the vehicle.

  Disconnect the clamp from the negative terminal of the vehicle battery.

  Close the bonnet.

Before returning the vehicle to the road:

- Connect the clamp to the negative terminal of the vehicle battery.

  Check the power windows operation.
- Check the tyre pressures.
- Fill the washer fluid reservoir.
- Check the engine oil level.
- Check the coolant level.

Vehicle checks

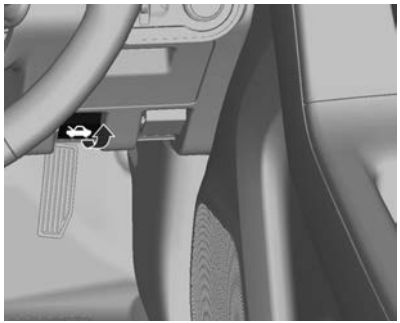
Doing your own service work

⚠Warning

Do not touch engine compartment components when the ignition is on.

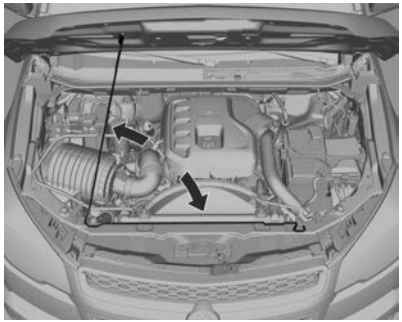
Bonnet

Opening



1. Pull the release lever rearwards and upwards.

2. Push the safety catch towards the driver side and open the bonnet.



3. Pull the support rod up, away from the holder and secure.

Closing

⚠Warning

To avoid injury and/or damage to the vehicle, check each time, before the bonnet is closed, that the contact area is unobstructed.

1. Place the support rod into the holder.
2. Lower the bonnet to approximately 30 cm and allow it to drop into the catch.
3. Check that the bonnet is engaged.
4. If it is not engaged, open the bonnet and repeat Steps 2 and 3.

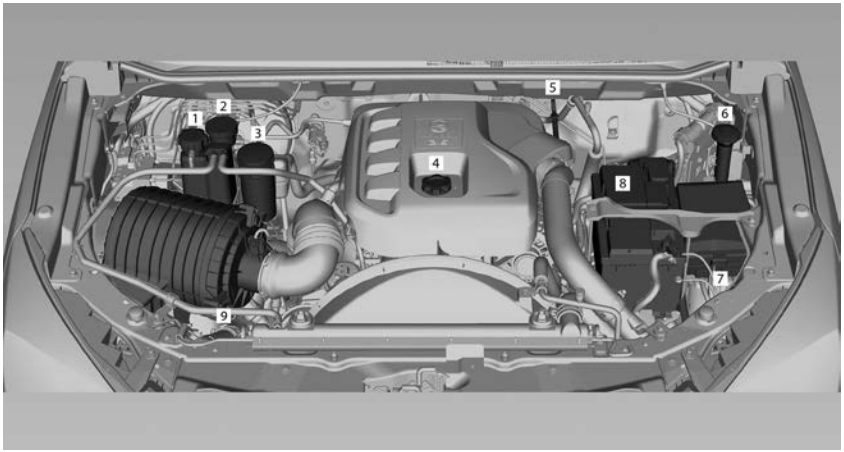
   Note
   Do not push on the bonnet to close.

⚠Warning

If while driving you notice that the bonnet has not been properly closed, pull the vehicle over to the side of the road at the earliest possible moment and close the bonnet correctly.

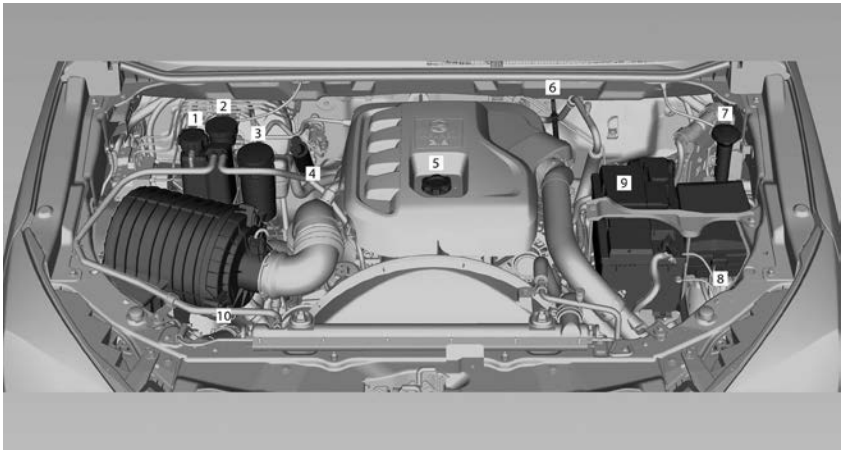
Engine compartment overview

2.5 L diesel



1. Coolant reservoir, see page 152
2. Brake/clutch (manual) fluid reservoir, see page 155
3. Power steering fluid reservoir, see page 153
4. Engine oil filler cap, see page 151
5. Dipstick for engine oil, see page 151
6. Washer fluid reservoir, see page 154
7. Engine compartment fuse box, see page 166
8. Battery, see page 156
9. Engine air filter, see page 152

2.8 L diesel



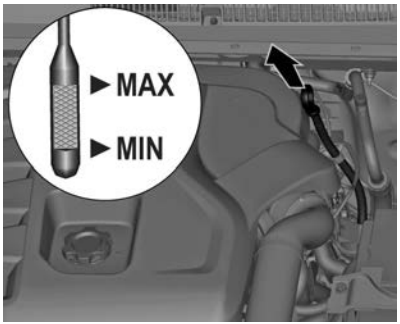
1. Coolant reservoir, see page 152
2. Brake/clutch (manual) fluid, reservoir, see page 155
3. Power steering fluid reservoir, see page 153
4. Automatic transmission fluid dipstick, see page 152
5. Engine oil filler cap, see page 151
6. Dipstick for engine oil, see page 151
7. Washer fluid reservoir, see page 154
8. Engine compartment fuse box, see page 166
9. Battery, see page 156
10. Engine air filter, see page 152

Engine oil

Checking oil level

- Check the engine oil level regularly and before a long journey.
- Maintain the correct level.
- The engine must be at operating temperature and the ignition turned off for at least 10 minutes.

1. Park the vehicle on a level surface.



2. Remove the dipstick and wipe clean.
3. Insert the dipstick to the stop on the handle.
4. Remove and read the engine oil level.

   The level should be at the MAX mark. Add oil if the level is at the **MIN** mark.
5. Insert the dipstick to the stop on the handle.

Note
The engine oil level must not exceed the **MAX** mark on the dipstick.

For correct engine oil specification, see Recommended fluids, lubricants and parts on page 187.

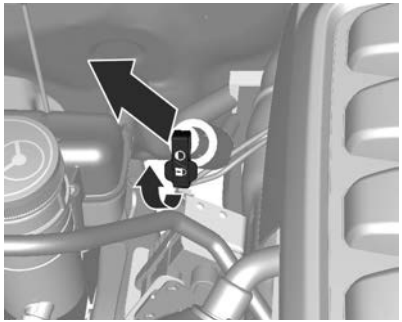
Caution
Overfilled engine oil must be drained or suctioned out.

6. Replace the engine oil filler cap tightly.

⚠Danger
Engine oil is an irritant and if ingested, can cause illness or death.
Keep out of reach of children.
Avoid repeated or prolonged contact with skin.
Wash exposed areas with soap and water or hand cleaner.
Be careful when draining the engine oil as it may be hot.

Automatic transmission fluid

1. Park the vehicle on a level surface.
2. Place automatic transmissions in **P**.
3. Keep the engine running.



4. Unlock the dipstick, remove and wipe clean.
5. Insert the dipstick to the stop on the handle.
6. Remove and read the automatic transmission fluid level.

   Add automatic transmission fluid if the level is at the **MIN** mark.
7. Insert the dipstick to the stop on the handle.
8. Lock the cap by pushing the lever downwards.

   Note
   The automatic transmission fluid level must not exceed the **MAX** mark on the dipstick.

   For correct automatic transmission fluid specification, see Recommended fluids, lubricants and parts on page 187.

Engine air filter

The engine air filter will be checked when the vehicle is serviced. Refer to the Service/Warranty Booklet.

Engine coolant

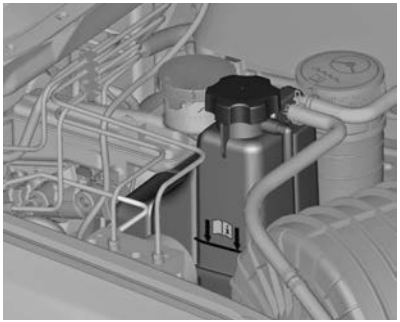
Engine coolant level

Check the coolant level at least once a week.

Checking coolant level

⚠Warning

Do not remove the coolant reservoir cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.



If the cooling system is cold, the coolant level should be above the line on the coolant reservoir.

Adding coolant

Caution

If the coolant level is too low, engine damage may occur.

Do not spill coolant on the vehicle's exterior surfaces as it can damage the paintwork. If you do, wash it off immediately.

Note

Use only approved coolant. See Recommended fluids, lubricants and parts on page 187.

1. Turn the ignition off.
2. Remove the coolant reservoir cap.
3. Add the required amount of coolant.
4. Replace the cap securely.
   If the coolant requires regular topping up, contact a Holden Dealer.

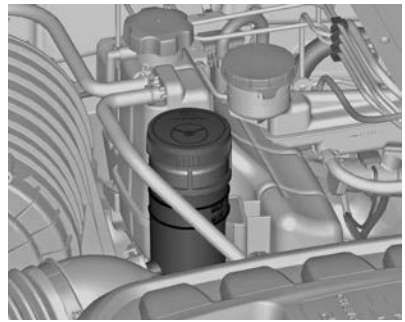
⚠Warning

Avoid repeated or prolonged contact with coolant.

Wash off with soap and water.

Keep out of reach of children.

Power steering fluid



The power steering fluid level must be between the **MIN** and the **MAX** marks.

Adding power steering fluid

1. Turn the ignition off.

Caution
Extremely small amounts of contamination can cause steering system damage and cause it to not work properly. Do not allow contaminants to contact the fluid side of the reservoir cap/dipstick or to enter the reservoir.

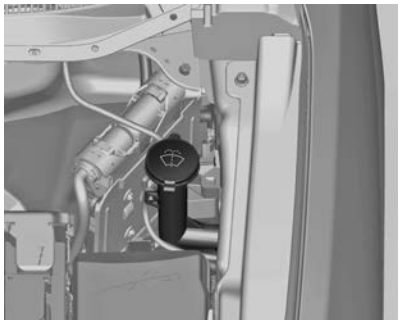
2. Rotate the power steering fluid reservoir cap anticlockwise and remove.
3. Add the required amount of power steering fluid.

   Do not overfill the reservoir.
4. Replace the power steering fluid reservoir cap by rotating clockwise to secure.

Caution
Do not operate the vehicle without the required amount of power steering fluid. Damage to the power steering system may occur.

For correct power steering fluid specification, see Recommended fluids, lubricants and parts on page 187.

Washer fluid



Check the fluid level weekly.

Adding washer fluid

1. Lift the front of the cap up.

   Use the correct amount of washer fluid additive. Refer to a Holden Dealer.

   Do not use ordinary soap or detergent as they froth up and damage the wiper rubbers.
2. Secure the cap.

Brake fluid

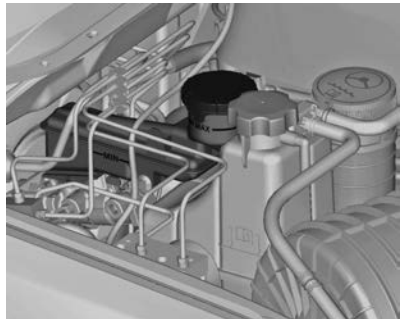
⚠Warning

Brake fluid is poisonous and corrosive and will damage the paint finish of the vehicle if spilt.

Caution

Avoid contact with eyes and skin. Wash any affected area immediately.

Checking brake/clutch (manual) fluid level



The level should be between the **MIN** and **MAX** marks.

If the fluid level is correct, do not remove the reservoir cap, as brake fluid exposed to the atmosphere will quickly absorb moisture.

Adding brake fluid

See Recommended fluids, lubricants and parts on page 187.

1. Turn the ignition off.
2. Wipe the sides of the cap clean.
3. Rotate the brake fluid reservoir cap anticlockwise and remove.
4. Top up with the recommended brake fluid.

⚠Warning

Use only new brake fluid. Use of old, used or inferior brake fluid may endanger the functioning of the brake system.

5. Secure the cap by rotating clockwise and clean up any spilt fluid.

If the brake fluid requires regular topping up, contact a Holden Dealer immediately.

Caution

Do not dispose of used brake fluid with household waste.

Use the local, authorised waste management facility.

Battery

⚠Warning

Batteries emit an explosive gas mixture which may be ignited. Therefore, you should keep sparks and flames away from the battery at all times. Never smoke near a battery.

Batteries contain sulphuric acid. If acid contacts skin or clothing, flush immediately with plenty of water. In case of eye contact, flush with plenty of water and contact a doctor immediately. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.

Keep batteries out of the reach of children.

Take care with all metal objects and tools including items you may wear (for example jewellery, rings and metal watch bands) near battery terminals.

The vehicle battery is maintenance free, provided that it has sufficient charging time and that electrical systems are not left on for prolonged periods of time.

Battery replacement

For battery location, see Engine compartment overview on page 149.

For replacement, refer to a Holden Dealer or authorised repairer.

Caution

Do not dispose of batteries with household waste.

Use the local, authorised waste management facility.

Battery disconnection

The battery may discharge if the vehicle is not used for approximately four weeks.

To disconnect the battery:

1. Turn the ignition off.
2. Disconnect the clamp from the negative terminal of the vehicle battery.

   Ensure the ignition is turned off before reconnecting the vehicle battery.

For emergency starting when the battery is flat, see Jump starting on page 177.

Diesel fuel filter

When the water level in fuel filter is excessive, **Water in Fuel – Contact Service** illuminates on the instrument panel.

Caution
The engine and fuel system may be seriously damaged if the vehicle is driven while **Water in Fuel – Contact Service i**s illuminated. Contact a Holden Dealer immediately to have the fuel filter drained.

Note
The fuel filter will be drained when the vehicle is serviced. Refer to the Service/Warranty Booklet.

Diesel fuel system bleeding

The system requires bleeding if the vehicle has run out of fuel.

Note
A minimum of 5 litres of diesel fuel must be in the tank for the bleeding operation to work correctly.

1. Turn the ignition on for 15 seconds, and then off.
2. Repeat Step 1 three times.
3. Start the engine for a maximum of 40 seconds.
4. Repeat Steps 1 to 3 after 5 seconds.

   If the engine does not start, contact a Holden Dealer.

Wiper blade replacement

Regularly check the condition of the wiper blades.

- Replace hard, brittle or cracked blades or those that smear dirt on the windscreen.
- If the blades are not wiping properly, clean both the blades and the windscreen. See Exterior care on page 182.

Bulb replacement

Contact a trained service technician if unsure about the bulb replacement process.

When replacing bulbs:

- Turn the ignition off and remove the key.
- Turn off related switches.
- Fit bulbs of the specified wattage only.
- Do not touch bulbs or reflectors with bare hands.
- Clean stained bulbs with methylated spirits.

Bulbs to be changed by a Holden Dealer

- Side turn signal lamps
- Turn signal lamps on the exterior mirrors
- Courtesy lamp
- Reading lamps
- Instrument panel lamps
- LED rear lamps
- Fog lamps

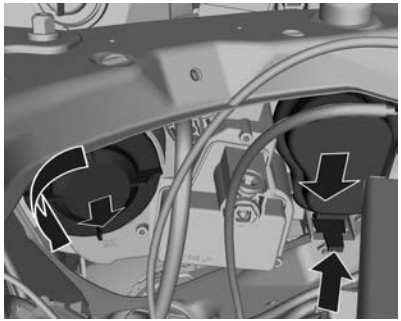
Caution

Condensation may temporarily appear on the inside of exterior lamp lenses after rain or washing the vehicle. Condensation occurs when there is a temperature difference between the inside and outside of the lamp allowing a fine mist on the inside surface of the lamp lens. This condensation will disappear when the vehicle is in a dry environment or the lamp is on. If water does collect in the lamp contact a Holden Dealer.

Headlamps

Low and high beam (Type A)

Replace headlamp bulbs from within the engine compartment.



To remove the bulb covers:

- Rotate the outboard protective cover anticlockwise to open.
- Pull the inboard lower clip outwards to open the inboard protective cover.

To replace the low beam bulb:

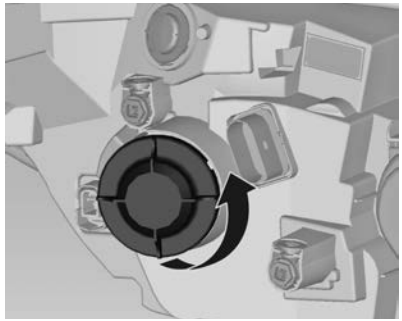
1. Disconnect the electrical connector.
2. Push the two upper tabs outwards.
3. Remove the bulb from the reflector housing, lifting upwards.
4. Replace the bulb.
5. Push the two upper tabs inwards to secure the bulb.
6. Refit the electrical connector and cover.
7. Check the lamp operation.

To replace the high beam bulb:

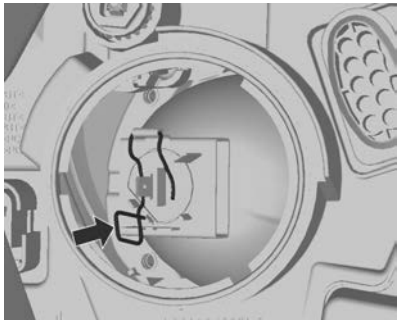
1. Disconnect the electrical connector.
2. Press the spring clips outwards to disengage.
3. Remove the bulb from the reflector housing.
4. Replace the bulb.
5. Press the spring clips inwards to secure the bulb.
6. Refit the electrical connector and cover.
7. Check the lamp operation.

Low and high beam (Type B)

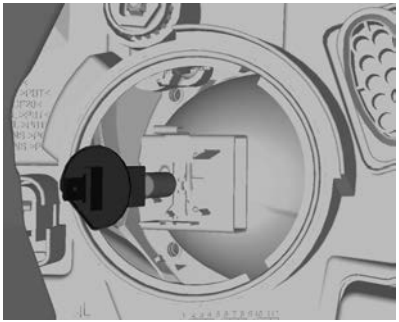
Replace headlamp bulbs from within the engine compartment.



1. Rotate the protective covers anticlockwise to open.

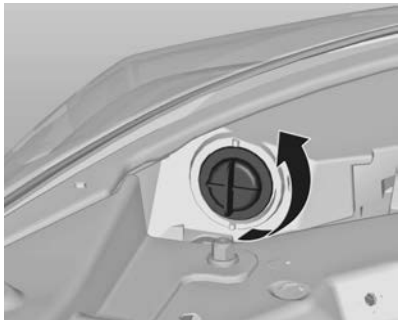


2. Disconnect the electrical connector.
3. Press the spring clip to disengage.
4. Swivel the spring clip to the right.

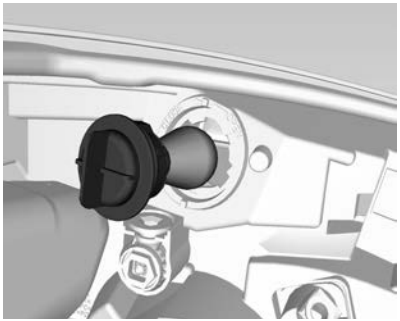


5. Remove the bulb from the reflector housing.
6. Fit the new bulb by engaging the lugs in the recesses on the reflector.
7. Engage the spring clip.
8. Reconnect the electrical connector.
9. Place the headlamp protective cover in position and close.
10. Check lamp operation.

Front turn signal lamps

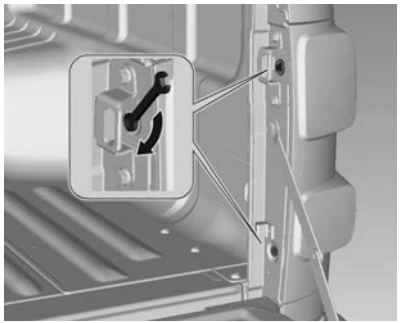


1. Rotate the bulb holder anticlockwise to disengage.



2. Push the bulb into the socket slightly and rotate anticlockwise, to remove.
3. Insert a new bulb.
4. Replace the bulb holder and rotate clockwise to engage.
5. Check lamp operation.

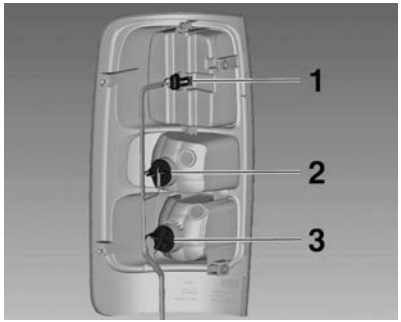
Tail lamps



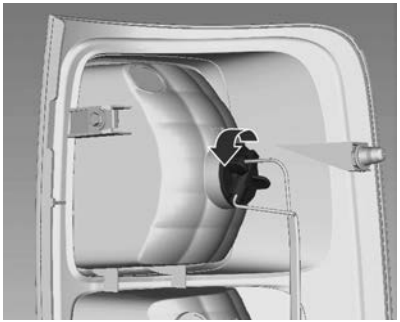
1. Unscrew both fasteners.

2. Remove the tail lamp assembly by pulling straight out of the body.

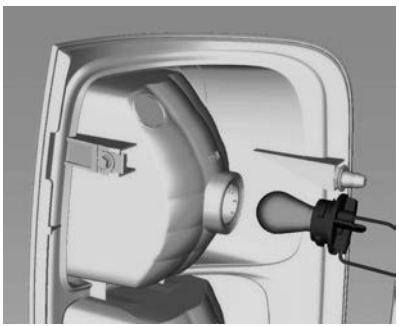
   Note
   Take care that the cable duct remains in position.



- Tail/brake lamp (1)
- Turn signal lamp (2)
- Reverse lamp (3)

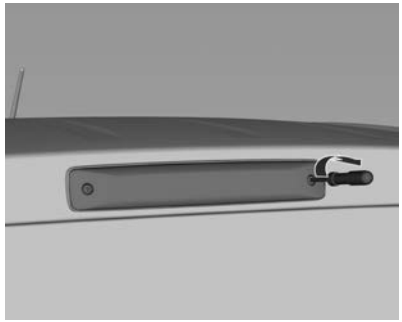


3. Rotate the required bulb holder anticlockwise.

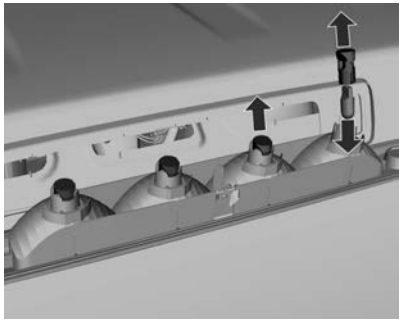


4. Remove the bulb holder.
5. Push the bulb into the socket slightly and rotate anticlockwise, to remove.
6. Insert a new bulb.
7. Insert the bulb holder into the tail lamp assembly by fastening into place.
8. Reinstall the tail lamp assembly and tighten the fasteners.
9. Check lamp operation.

Centre high-mounted brake lamp



1. Unscrew the two screws.
2. Remove the lamp assembly.



3. Pull the bulb socket to remove it from the lamp assembly.
4. Holding the socket, pull the bulb to remove it from the socket.
5. Push the new bulb into the socket.
6. Insert the bulb socket into the lamp assembly and push until it clicks.
7. Reinstall the lamp assembly and tighten the screws.
8. Check lamp operation.

Number plate lamp

The number plate lamp is located in the rear bumper.

1. On the reverse side of the bumper, rotate the bulb holder anticlockwise to disengage.
2. Remove the bulb from the holder.
3. Insert a new bulb.
4. Insert the bulb holder into the bulb housing and rotate clockwise.
5. Check lamp operation.

Electrical system

Fuses and relays

Fuse boxes are located:

- In the engine compartment
- In a storage compartment on the driver side

There is a primary fuse holder connected to the positive battery post.

⚠Warning

Turn off the ignition (LOCK position) and any electrical equipment before changing a fuse.

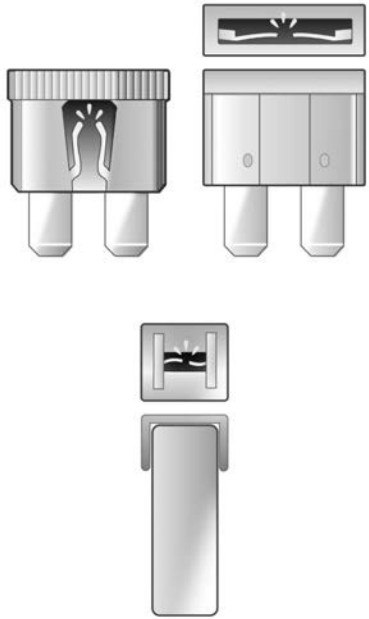
- Replace blown fuses promptly.
- A blown fuse can be recognised by its melted wire.
- Do not replace the fuse until the cause of the fault has been remedied.
- Some functions are protected by several fuses.

⚠Warning

When replacing a fuse be sure to use a fuse of the specified amperage.

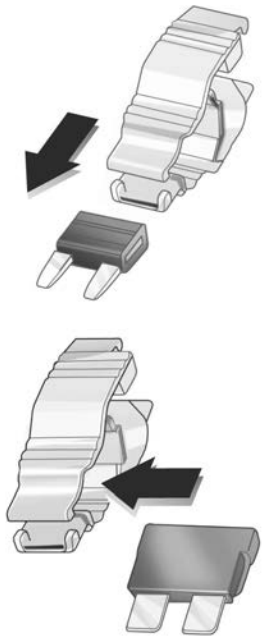
Never install a wire or similar as it could damage electrical components and cause a fire.

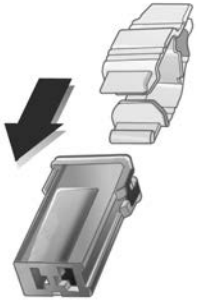
Any improper alterations to the electrical system may cause a fire hazard and engine damage. To maintain your own safety and that of the vehicle, have any work involving the electrical system or the replacement of high current fuses or relays carried out by a Holden Dealer.



Fuse extractor

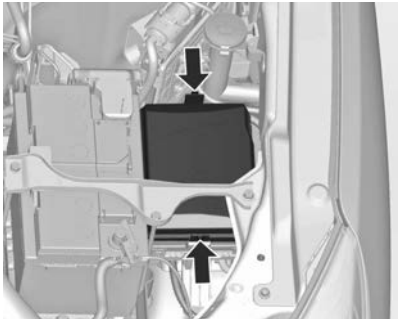
A fuse extractor can be located in the fuse box in the engine compartment.





Place the fuse extractor on the top or side of the fuse to extract the fuse.

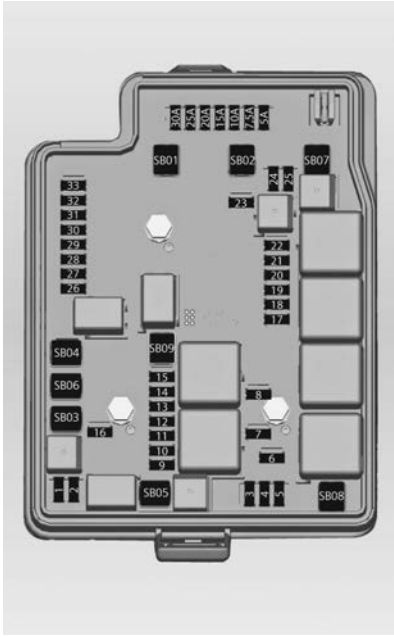
Engine compartment fuse box



The fuse box is located on the passenger side of the engine compartment.

To disengage the cover:

- Lift upwards and remove.



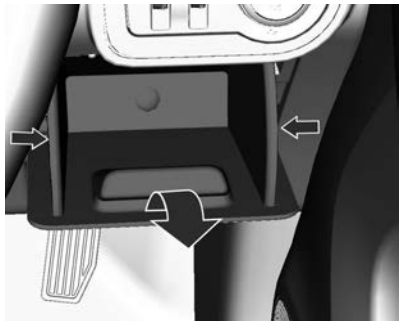
The vehicle may not be equipped with all of the fuses, relays and features shown.

Fuses

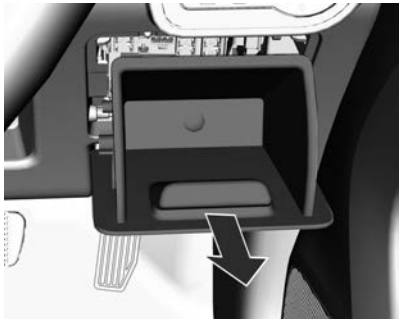
1	COMPRESSOR A/C CLUTCH	(10A)
2	SPARE	(15A)
3	SPARE	(15A)
4	-	
5	HORN	(15A)
6	FRONT FOG LAMP	(15A)
7	HIGH BEAM LH	(10A)
8	HIGH BEAM RH	(10A)
9	SPARE	(10A)
10	ENGINE_3	(15A)
11	ENGINE CONTROL MODULE1	(20A)
12	ENGINE_1	(10A)
13	ENGINE_2	(10A)
14	ENGINE_4	(15A)
15	PWT	(15A)
16	TRACTION CONTROL MODULE	(15A)
17	TRANSFER CASE MODULE AND LAMP LEVELLING	(10A)
18	CLUSTER - A/C - SDM	(10A)
19	FUEL PUMP	(20A)
20	SPARE	(5A)
21	REAR WINDOW HEATER	(30A)
22	SPARE	(15A)
23	VISCOUS HEATER	(15A)
24	-	
25	FRT WASHER	(10A)
26	-	
27	BODY CONTROL MODULE RVC	(5A)
28	DRL/COLD START	(7.5A)
29	ABS MODULE ESC1	(30A)
30	CONTENT THEFT RELAY	(10A)
31	BODY CONTROL MODULE BATT7	(15A)
32	ENGINE CONTROL MODULE	(15A)
33	COMMON ENABLE	(10A)
SB01	ABS MODULE PUMP	(50A)
SB02	TRANSFER CASE CONTROL MODULE (4X4)	(30A)
SB03	GLOW PLUG MODULE (DIESEL)	(60A)
SB04	SPARE	(20A)
SB05	STARTER MOTOR SOLENOID	(30A)
SB06	FRONT WIPER	(30A)
SB07	FUEL HEATER	(30A)
SB08	-	
SB09	SPARE	(30A)

Instrument panel fuse box

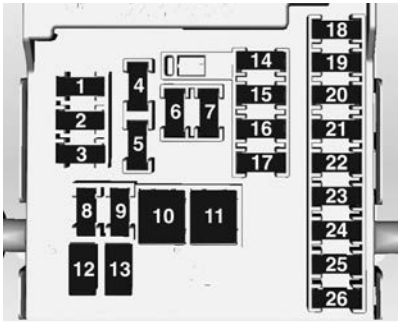
The fuse box is in a storage compartment on the driver side of the instrument panel.



1. Press the sides of the storage compartment inwards.



2. Lift the storage compartment until it audibly disengages.
3. Remove by pulling rearwards.
4. Reinstall in the reverse order.



The vehicle may not be equipped with all of the fuses, relays and features shown.

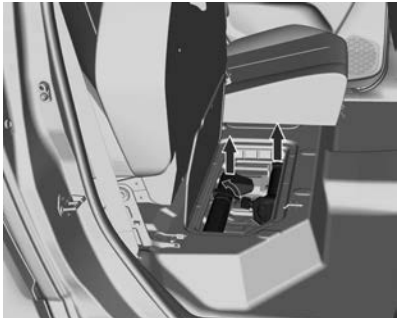
Fuses

1	HVAC AUTO	(10A)
2	BODY CONTROL MODULE (6)	(15A)
3	BODY CONTROL MODULE (5)	(15A)
4	CIGAR LIGHT AND POWER OUTLET	(20A)
5	CLOCK SPRING	(2A)
6	POWER WINDOW	(30A)
7	POWER OUTLET	(20A)
8	BODY CONTROL MODULE (2)	(15A)
9	BODY CONTROL MODULE (4)	(15A)
10	BODY CONTROL MODULE (8)	(30A)
11	RAP & ACCESSORY 12V	(40A)
12	-	
13	-	
14	DATA LINK CONNECTOR (DLC)	(7.5A)
15	SENSING AND DIAGNOSTIC MODULE (SDM)	(10A)
16	INSTRUMENT PANEL CLUSTER (IPC)	(10A)
17	RADIO	(20A)
18	HVAC BLOWER	(30A)
19	OUTSIDE REARVIEW MIRRORS	(5A)
20	-	
21	HVAC CONTROL HEAD	(10A)
22	IGNITION SWITCH	(2 A)
23	BODY CONTROL MODULE (5)	(15A)
24	BODY CONTROL MODULE (3)	(15A)
25	POWER WINDOW SWITCH	(20A)
26	POWER SEAT	(30A)

Vehicle tools

Tools

The jack and tools are located in a storage compartment behind the driver's seat or under a back seat. See Tyre changing on page 172.



1. Unhook the strap.
2. Remove the jack by rotating the lever on the side anticlockwise.

   When replacing the jack, rotate clockwise to secure into the bracket.
3. Remove the tools.

Wheels and tyres

Tyre and rim condition

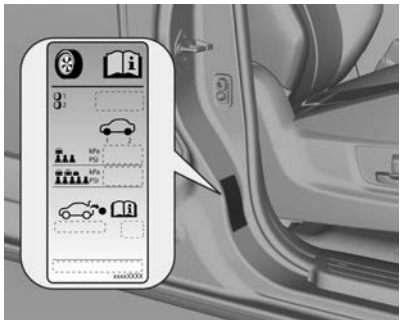
- To avoid tyre and rim damage and possible tyre blowout, do not drive over sharp edges.
- Drive over edges slowly and at right angles, if possible.
- When parking, ensure the tyres are not pressed against the edge of the kerb.
- Check the tyres regularly for damage, stones, punctures, cuts, cracks, bulges etc. Check the rims for damage. Contact a Holden Dealer, if in doubt.

Tyre pressure

Keep the tyres at the recommended pressures to avoid increased fuel consumption, uneven and premature tyre wear.

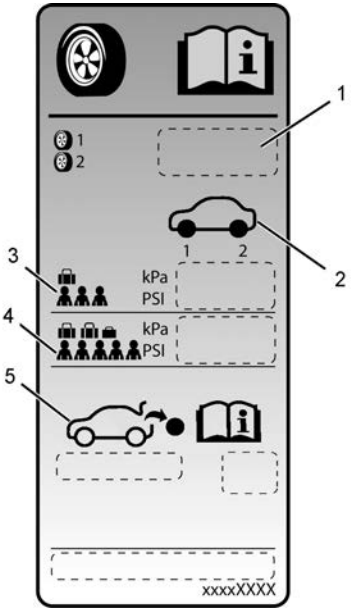
- Tyre pressure should be checked when cold as tyre pressure will increase as the tyres warm up.
- Check the air pressure of tyres (including the spare) weekly, to ensure occupant safety, as well as reducing fuel consumption and increasing the life of the tyres.
- Replace any valve dust caps or extensions.

Tyre placard



The correct pressures for tyres are shown on the tyre placard in the driver's door frame and in the tyre pressure table. See Tyre pressure on page 192.

Always inflate the spare tyre to the pressure specified for maximum load.



1. Tyre specifications
2. Tyre positions
3. Normal load (up to three people)
4. Full load (five people plus load)
5. Spare tyre information

Tread depth

Check tread depth at regular intervals.

- Replace the tyres when:

  They are worn to the point where the tread wear indicators (TWI) appear.
- If there is more wear on the front tyres than on the rear, swap the front and rear wheels.

Ensure that the direction of rotation of the wheels is the same as previous.

- Tyres age, even if they are not used. Replacement of tyres every six years is recommended.

⚠Warning

Do not attempt to drive on a flat tyre more than is necessary to stop safely. Driving even a short distance can damage the tyre and wheel beyond repair. Tyres which have been repaired or retreaded are not capable of being driven safely at high speeds. Therefore, their use is not recommended.

Buying new tyres

Refer to the tyre placard on the vehicle for tyre size and load rating.

Using a different size or type of tyre may affect:

- Ride
- Handling
- Speedometer accuracy
- Vehicle ground clearance
- Tyre clearance
- Snow chain clearance

⚠Warning

Do not use different sizes or types of tyres and wheels than those originally fitted to the vehicle. Safety and performance of the vehicle may be affected. It may also affect handling and lead to serious injury.

When replacing tyres, install all four tyres and wheels of the same size, type, tread, brand and load-carrying capacity.

Wheel covers

Use wheel covers and tyres that are factory approved for the vehicle and which comply with all of the relevant wheel and tyre combination requirements.

⚠Warning

Use of incorrect tyres or wheel covers may result in damage to the vehicle and personal injury.

Tyre chains

- Tyre chains should be fitted only on the rear wheels.
- Remove large hub caps and valve extensions that contact parts of the chain.

⚠Warning

Tyre chains may only be used at speeds up to 50 km/h. Tyre chains should only be used for short distances if the roads are not snow covered. The hard road surface causes rapid wear and the chain may break. Tyre chain links should not be thicker than 13 mm and the clasp should be well away from the bodywork. Thicker chains may damage the vehicle body.

- Check the tyre placard for correct tyre pressures. See Tyre placard on page 170.
- Whenever tyre chains are fitted, switch off the ESC. See Electronic Stability Control (ESC) on page 132.
- If driving in snowy conditions with a snorkel, see Snorkel intake on page 144.

Tyre changing

⚠Warning

All passengers must be out of the vehicle when it is being jacked.

Do not jack a vehicle with a trailer attached. Remove the trailer first.

Only jack the vehicle on hard, level surfaces.

Ensure moving parts of the jack are adequately lubricated before use.

Use the jack only at the designated lifting points. Use in other locations may result in the vehicle falling off the jack, or damage to the vehicle.

Do not start or run the engine while the vehicle is supported by the jack.

Use the jack only for lifting the vehicle when changing wheels.

Do not get under a vehicle that is supported by a jack. No person should place any portion of their body under a vehicle that is supported by a jack.

Vehicles with alloy wheels may have a steel spare wheel. Drive carefully and do not exceed 80 km/h if the tyre size or tread pattern of the spare tyre is different to the other tyres on the vehicle. Although the spare tyre was fully inflated when the vehicle was new, it can lose air over time. Check the inflation pressure regularly.

After installing the spare tyre on the vehicle, stop as soon as possible to check the inflation pressure is correct. Have the flat tyre repaired or replaced and installed back on the vehicle as soon as possible.

1. Park on a hard, level surface, in a safe location.
2. Apply the park brake firmly.
3. Place manual transmissions in first or reverse gear.

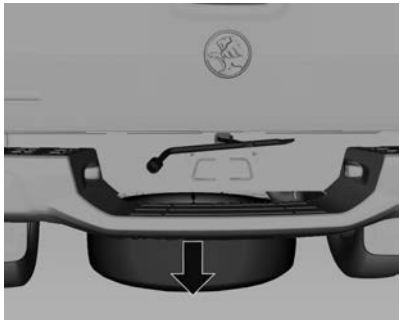
   Place automatic transmissions in position **P**.
4. Switch the hazard warning flashers on.
5. Turn off the engine and remove the key.
6. Chock the wheel diagonally opposite the flat tyre with a suitable solid object.

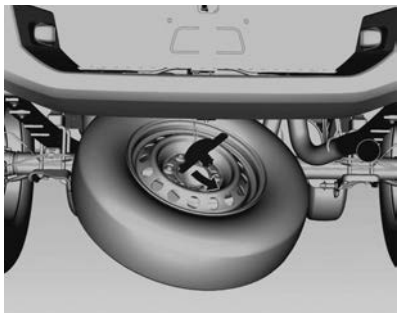
   Note
   Do not change more than one wheel at one time.
7. Remove the tools. See Vehicle tools on page 169.
8. Assemble the wheel wrench, jack handle extensions and the jack handle using a screwdriver.

The vehicle may have a spare wheel retainer cover.

9. Remove the spare wheel retainer cover and insert the chiselled end of the jack handle, at a slight angle, through the central hole in the rear bumper and into the funnel-shaped guide.

10. Rotate the wheel wrench anticlockwise to lower the spare tyre to the ground.
11. Continue to rotate the wheel wrench until the spare tyre can be pulled out from under the vehicle.



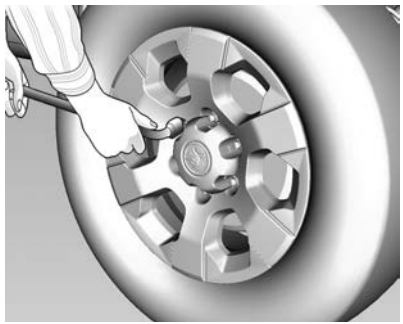


12. Tilt the retainer and slide it up the cable so it can be pulled up through the wheel opening.
13. Place the spare tyre near the flat tyre.

Wheel nut removal

14. Remove the centre cap by placing the chisel end of the wheel wrench into one of the slots on the cap and gently prise the cap out.

    To protect the wheel, place a soft cloth between the wheel wrench and the wheel.



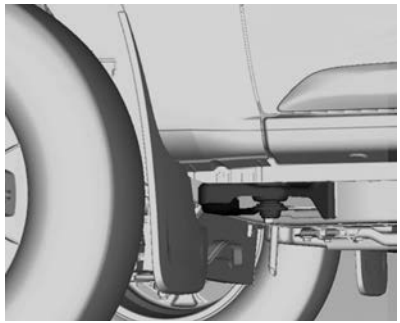
15. Turn the wheel wrench anticlockwise to loosen all the wheel nuts.

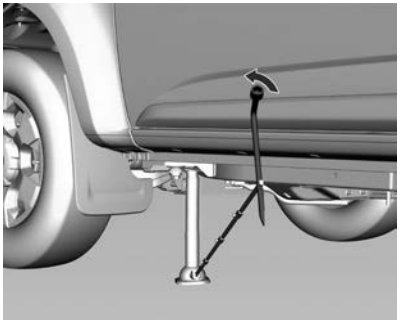
    Note

    Do not remove the wheel nuts at this stage.

Jacking procedure

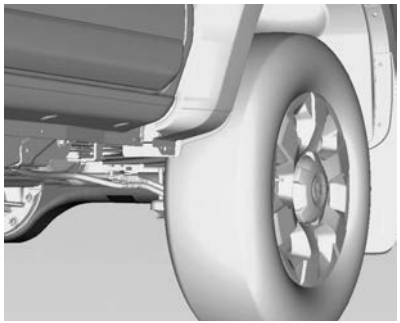
Front position:





If the flat tyre is on the front of the vehicle, position the jack to the rear of the front tyre in the cut out on the frame.

Rear position:



If the flat tyre is on the rear, position the jack under the rear axle and get as close as possible to the shock absorber.

16. Set the jack to the necessary height before positioning it directly below the jacking point in a manner that prevents it from slipping.

⚠Warning

Failure to position the jack as described could cause the vehicle to slip off the jack.

Do not get under a vehicle that is supported by a jack. No person should place any portion of their body under a vehicle that is supported by a jack.

17. Attach the jack handle and with the jack correctly aligned.
18. Rotate the handle until the wheel is clear of the ground.
19. Remove the wheel nuts.
20. Exchange the wheel on the vehicle with the spare wheel.

21. Remove any rust or dirt from the wheel nuts and studs, mounting surfaces and spare wheel.

⚠Danger

Never use oil or grease on bolts or nuts as the nuts may come loose. The vehicle wheel could fall off and may lead to serious injury or death.

22. Put the wheel nuts back on with the rounded end of the nuts towards the wheel.
23. Tighten each wheel nut by hand, then use the wheel wrench to tighten the nuts until the wheel is held against the hub.
24. Lower the vehicle by reversing the jacking procedure.
25. Remove the jack from under the vehicle.
26. With the wheel on the ground, use the wheel wrench to tighten the wheel nuts in a crosswise sequence.

⚠Warning

As soon as possible after changing a wheel, have the wheel nuts tightened with a torque wrench to 118 Nm (Newton metres). Wheel nuts must be tightened evenly to the correct torque, as wheel nuts which have not been tightened properly could eventually allow the wheel to come off while the vehicle is moving.

27. Stow the replaced wheel, by reversing Steps 8 to 13.
28. Stow the tools in the storage compartment. See Vehicle tools page 169.
29. Have the flat tyre renewed or repaired.

When reinstalling the repaired wheel:

1. Install the centre cap.
2. Place the cap on the wheel and tap it into place until it is flush with the wheel.

Jump starting

Read the following warnings and procedure in full before attempting to jump start the vehicle.

If you are still unsure about jump starting, Holden strongly recommends for your safety and that of the vehicle that you seek the assistance of a suitably trained service technician.

⚠Warning

Do not push start or tow start the vehicle. Therefore, if the battery is flat, jump start, but do not push start the vehicle.

Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, adhere to the following when working near a battery:

- Do not attempt jump starting directly from the battery in the engine compartment.
- Do not let the jumper lead clamps touch each other or other metal parts.
- Do not allow the jumper leads to contact any rotating engine components.
- Do not use open flames or sparks near the battery.
- Do not smoke near the battery.
- Never use a quick charger to start the engine.
- The battery must be removed from the vehicle for recharging.
- Wear eye protection such as safety glasses and avoid leaning over the battery.
- Battery acid is corrosive. If it gets on your skin, wash with plenty of water immediately. If it gets in your eyes you should not only flush with lots of water, but should also seek medical help. Battery acid also damages paint and fabrics. To minimise damage, wash it off immediately.
- Remove rings, metal watch bands and other metal jewellery before working around the battery.
- If a permanently connected hands free telephone kit is fitted to the vehicle, remove the fuse for the telephone kit before jump starting. Remember to replace the fuse afterwards.

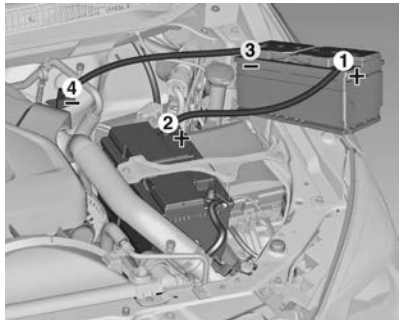
- A discharged battery can freeze at temperatures of 0°C.

  Defrost the frozen battery before connecting jumper leads.
- Use a booster battery with the same voltage (12 volts). Its capacity (Ah) must not be much less than that of the discharged battery.
- Use jumper leads with insulated terminals and a cross section of at least 25 mm^2.
- Do not disconnect the discharged battery from the vehicle.
- Switch off all unnecessary electrical devices.
- Do not allow the terminals of one lead to touch those of the other lead.
- The vehicles must not come into contact with each other during the jump starting process.

Jump starting procedure

1. Position the two vehicles so that they are not touching.
2. Apply the park brakes.
3. For manual transmissions, place the shift lever in neutral.

   For automatic transmissions, place the shift lever in **P**.
4. Turn the ignition off.
5. Turn off all lamps and accessories in both vehicles, except the hazard warning flashers or any lights needed for the work area.



6. Connect one end of the RED lead to the positive terminal of the booster battery (1).
7. Connect the other end of the RED lead to the positive terminal of the discharged battery (2).
8. Connect the BLACK lead to the negative terminal of the booster battery (3).

9. Connect the other end of the black lead to a vehicle grounding point, such as the engine block or an engine mounting bolt (4).

   Connect as far away from the discharged battery as possible (at least 60 cm).

   Note
   Route the leads so that they cannot catch on rotating parts within the engine compartment.

10. Start the engine of the vehicle providing the jump start and allow to idle for at least 5 minutes.
11. Start the engine of the vehicle with the flat battery.

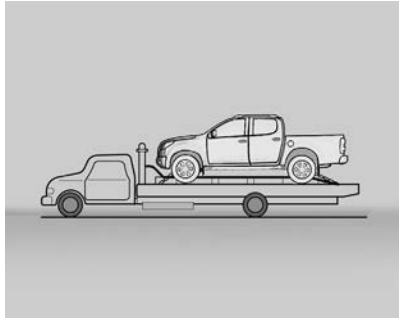
    Start attempts should be made for no longer than 15 seconds at an interval of 1 minute.

12. Allow both engines to idle for approximately 3 minutes with the leads connected.
13. Switch on the headlamps and the heated rear window of the vehicle that received the jump start.
14. Leave the engines running while removing the BLACK negative jumper lead first, followed by the RED positive jumper lead.

Note
While removing each clamp, do not touch any other metal while the other end remains attached.

Towing

Towing the vehicle

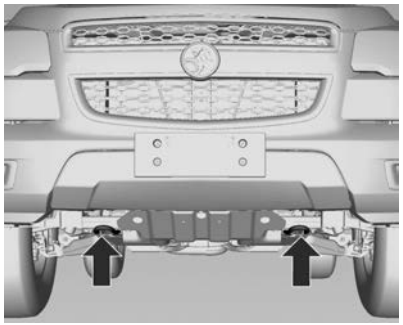


A flat-bed tow truck is the best method of towing the vehicle to avoid damage.

⚠Warning
No passenger should remain in the vehicle being towed.

Proper lifting or towing equipment is necessary when lifting or towing the vehicle to prevent damage. State and local laws must be followed.

In an emergency, the vehicle may be towed on all four wheels for short distances only, using the front towing eyes.



Caution
No load applied to an individual front towing eye shall exceed 1,500 kg (static or dynamic).

Emergency towing procedure

Tow only on hard-surfaced roads for a short distance and at low speeds:

1. Fit the towing equipment to the front towing eyes.

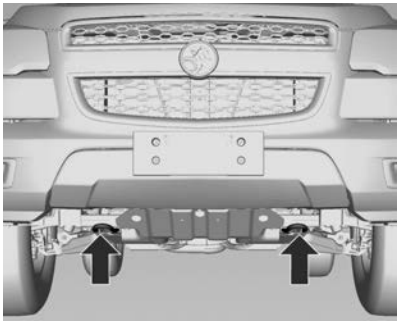
   Do not attach towing equipment to the bumpers or brackets, suspension or cross members.
2. Turn the ignition key to **ON** to enable the steering lock, windscreen wipers and turn signals operation.
3. Place the shift lever in **N** or neutral.
4. Release the park brake.

   Note
   Automatic transmission: If the vehicle's battery is flat and the vehicle requires towing, see Interruption of power supply on page 123.

Notes

- A driver must be in the vehicle to steer and operate the brakes.
- Drive slowly when towing.
- Power assist for brakes and power steering are not available when the engine is turned off. The brakes and steering still function, but require greater effort.
- To prevent exhaust fumes entering the towed vehicle, close the windows and press .
- Vehicles with damaged transmissions must not be towed.
- The wheels, axles, drive train, steering and brakes must be in good condition.
- Only the driver should be inside a towed vehicle.

Vehicle recovery



The vehicle may be recovered using the front towing eyes.

Attach a tow rope or other suitably rated system to the towing eyes.

Ensure all equipment is in good condition and is being used correctly.

Caution

The front towing eyes are rated to 1,500 kg each. Any load (static or dynamic) applied to these locations must not exceed the rated capacity of each point.

Care should be taken not to damage the bumper fascia or other vehicle components with the tow rope or recovery system, during recovery.

Appearance care

Exterior care

Washing

The paintwork of the vehicle is exposed to environmental influences. Wash and wax regularly. When using automatic vehicle washes, select a programme that includes waxing.

Bird droppings, dead insects, resin, pollen and the like should be cleaned off immediately, as they contain aggressive constituents which can cause paint damage. Failure to do so may result in permanent damage, particularly in hot weather conditions.

Road bloom is a gradual build up of road and environmental grime. This should be removed with a paint cleaner once a year, in addition to normal washing.

If using a vehicle wash, comply with the vehicle wash manufacturer's instructions. Never use an automatic wash that requires anything touching the paint (other than water). The wipers must be switched off. Remove the antenna and external accessories.

If you wash your vehicle by hand, make sure that the insides of the wheel housings are also thoroughly rinsed out.

Clean edges and folds on opened doors and the bonnet as well as the areas they cover.

Have the door hinges of all doors greased by a Holden Dealer.

Caution

Do not clean the engine compartment with a steam-jet or high-pressure jet cleaner.

Thoroughly rinse and chamois off the vehicle. Rinse chamois frequently. Use separate chamois for painted and glass surfaces: remnants of wax on the windows will impair vision.

Do not use hard objects to remove spots of tar. Use tar removal spray on painted surfaces.

⚠Warning

Take care when moving the vehicle after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Exterior lamps

Headlamp and other lamp covers are made of plastic. Do not use any abrasive, solvent based cleaners or caustic agents and do not dry-clean them.

Air intakes

Clear debris from the air intakes, between the bonnet and windscreen and below the front bumper, when washing the vehicle.

Polishing and waxing

Wax the vehicle regularly (at the latest when water no longer beads).

Polishing is necessary only if the paint has become dull or if solid deposits have become attached to it.

Paintwork polish with silicone forms a protective film, making waxing unnecessary.

Plastic body parts must not be treated with wax or polishing agents.

Windows and windscreen wiper blades

Use a soft lint-free cloth or chamois leather together with window cleaner and insect remover.

- Never use abrasive cleaners to clean glass.
- Refer to a Holden Dealer for windscreen washer additive.
- Old wiper blades can cause windscreen scratching. Regularly inspect and replace them.

Caution
Do not operate the wiper blades by hand as this damages the wiper drive mechanism.

When cleaning the rear window, make sure the heating element inside is not damaged.

Clean smearing wiper blades with a soft cloth and window cleaner.

Wheels and tyres

Do not use high-pressure jet cleaners.

- Remove oil and grease with soap and water or detergent.
- Do not use petrol to clean tyres.
- Use a good quality tyre and bumper shine if required.
- A good quality wheel cleaner can be used for cleaning alloy wheels.
- Do not use abrasive cleaners.

Paintwork damage

Rectify minor paintwork damage with a touch-up pen before rust forms.

Have more extensive damage or rust areas repaired by your Holden Dealer.

Caution

Do not spill coolant on the vehicle's exterior surfaces as it can damage the paint work. If you do, wash it off immediately.

Underbody

Substances can cause rust under the vehicle.

- Hose the underbody with clean water whenever the vehicle is washed.
- Where the vehicle is exposed to heavy concentrations of corrosive materials, inspect and wash the complete underbody at least once each year, preferably after winter exposure.

Interior care

⚠Warning

Many cleaning products are toxic, flammable or may damage the interior. When cleaning the interior, avoid volatile cleaners such as acetone, lacquer thinners, enamel reducers, nail polish removers, or cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, petrol or naphtha for any cleaning purpose. Ensure that the vehicle is well ventilated while using any cleaners and always follow the cleaning product manufacturer's recommendations. Water based cleaners, rather than solvent based cleaners, are recommended.

Steam cleaning of seats is not recommended.

Interior and upholstery

Only clean the vehicle interior, including the instrument panel fascia and panelling, with a dry cloth or interior cleaner.

The instrument panel should only be cleaned using a soft damp cloth.

Clean fabric upholstery with a vacuum cleaner and brush. Remove stains with an upholstery cleaner.

Clean seat belts with a mild, non-abrasive soap and lukewarm water.

After washing, thoroughly, sponge the solution out of the belts.

Caution

Close Velcro fasteners as open Velcro fasteners on clothing could damage seat upholstery.

Plastic and rubber parts

Plastic and rubber parts can be cleaned with the same cleaner as used to clean the body. Use interior cleaner if necessary. Do not use any other agent. Avoid solvents and petrol in particular. Do not use high pressure jet cleaners.

Floor mats

Ensure that floor mats, when fitted, are securely fastened.

Service and maintenance

General information 186
Recommended fluids, lubricants and parts 187

General information

Service information

In order to ensure economical and safe vehicle operation and to maintain the value of your vehicle, it is of vital importance that all maintenance work is carried out at the proper intervals as specified.

See your Service/Warranty Booklet for the service schedules and for more information.

Recommended fluids, lubricants and parts

Engine type	2.5 L and 2.8 L diesel
Engine oil specification	SAE 5W-30; dexos (dexos™ 2)
Coolant specification	50% clean fresh water and 50% Dexcool® anti-freeze coolant, conforming to specification number GM6277M
Manual transmission fluid	Dexron® III
Automatic transmission fluid	Dexron® VI
Transfer case fluid (four-wheel drive)	Dexron® VI
Differential oil	Synthetic Hypoid 75W/90 GL5
Brake fluid	DOT 4 Hydraulic brake fluid, conforming to specification number GMW3356
Power steering fluid	Dexron® VI
Battery	12 volts, 90 amp hours

Technical data

Vehicle identification 188
Vehicle data 189

Vehicle identification

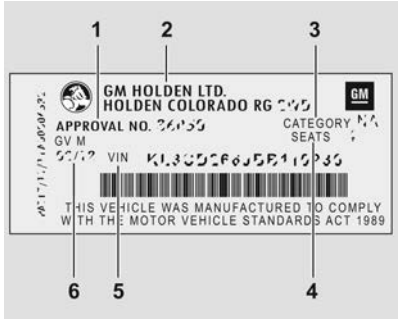
Vehicle identification number (VIN)

The Vehicle Identification Number (VIN) is located on the chassis rail on the driver side.

The VIN is also located on the instrument panel visible through the windscreen.

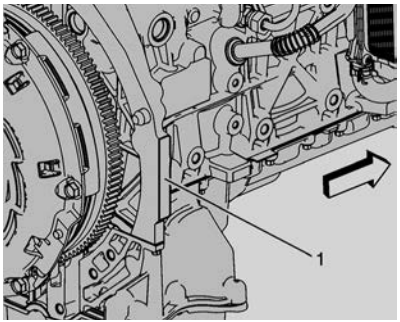
Identification label

An identification label is located on the front driver's door frame.



1: Approval number
2: Manufacturer
3: Category
4: Number of seats
5: Vehicle identification number
6: Compliance date

Engine number



⇨: Front of vehicle

The engine serial number (1) is located on the right side at the rear of the engine block.

Vehicle data

Engine data

Engine type	2.5 L L4 Turbo Diesel	2.8 L L4 Turbo Diesel
Number of cylinders	4	4
Engine	2449 cc	2776 cc
Engine power	Please refer to holden.com.au	
Engine torque	Please refer to holden.com.au	
Diesel fuel	Meeting Euro Standard EN590	

Dimensions (mm)

		Length	Width (incl. mirrors)	Height	Front and Rear Track	Front overhang	Wheel base
Single cab chassis	4x2	5147	2132	1785	1570	944	3096
	4x4	5147	2132	1785	1570	944	3096
Crew cab chassis	4x2	5127	2132	1780	1570	944	3096
	4x4	5127	2132	1780	1570	944	3096
Crew cab pickup	4x2	5347	2132	1780	1570	944	3096
	4x4	5347	2132	1780	1570	944	3096
Space cab chassis	4x4	5127	2132	1780	1570	944	3096
Space cab pickup	4x4	5347	2132	1780	1570	944	3096

The above figures are based on the design dimensions.
Note Length of cab chassis is determined by tray or body fitted.

Capacities

Engine type	2.5 L L4 Turbo Diesel	2.8 L L4 Turbo Diesel
Refill engine oil including filter (approximately)	6.4 L	5.7 L
Coolant (approximately)	9.0 L	9.0 L
Fuel tank	76.0 L	76.0 L

Axle loads

Maximum front and rear axle loads

Do not exceed the maximum axle loads, including the weight of any options, towball download when towing, or accessories fitted to the vehicle. Weigh at a weighbridge if unsure.

	Front axle load (kg)	Rear axle load (kg)
All models	1450	1850

Refer to the vehicle's compliance plate for gross vehicle mass (GVM) figures.

Carrying capacity

Carrying capacity (payload) is the maximum capacity of the vehicle for the carriage of all non-standard items including cargo carrying devices (e.g. tray or body, if applicable), the cargo itself, occupants, towball download when towing, optional equipment and accessories.

Light commercial vehicles, depending on their model and specification, have different carrying capacities.

Tyre pressure

Tyre size	Recommended pressure									
	Normal load				Maximum load				Spare	
	Front		Rear		Front		Rear		-	
	kPa	PSI	kPa	PSI	kPa	PSI	kPa	PSI	kPa	PSI
245/70 R16 SL 111S	240	35	240	35	260	38	300	44	300	44
255/65 R17 XL 110S										

Customer information

Customer satisfaction procedure 193
Customer assistance offices..... 193

Customer satisfaction procedure

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation, servicing, parts/accessories or the validity of original equipment supplied with your vehicle will be handled by your Holden Dealer Sales and Service Department.

We realise however that, with the best intentions, misunderstandings sometimes occur.

Therefore, we suggest you discuss any concern with one of the Holden Dealer management people.

If you have not received satisfaction from the Sales Manager or Service Manager, go to the General Manager or to the Dealer Principal.

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

Customer assistance offices

Australia

The Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call.

The contact number is:

1800 033 349

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne 3001

Your letter should clearly outline your concern or query and include:

- Your name and address
- Telephone numbers, both private and business
- Servicing dealer's name and address
- Vehicle model
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of the Service/ Warranty Booklet in your vehicle's glove box
- Date of purchase
- Current odometer reading

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of the Service/Warranty Booklet in your vehicle's glove box.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

New Zealand

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand.

Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glove box wallet.

New Zealand Assistance can be reached on:

0800 HOLDEN (**0800 465 336**)

This number provides access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

If you prefer to write the address is:

The Manager
Holden Customer Assistance Centre
PO Box 11195
Ellerslie
Auckland 1542

A

Accessories
- Power outlet 56
- Retained Accessory Power (RAP) 120

Active safety systems
- Antilock Brake System (ABS)..... 129
- Electronic Stability Control (ESC) 132

Airbags 37
- Airbag fault warning 62
- Airbags and child restraints..... 40
- SRS warning light..... 62

Air conditioning..... 108
Air filter 152
Air pressure, tyres 169, 192
Air vents.....114
Alarm system..... 21
Alternator warning light..... 62
Anchorage points, child restraints 43
Anti-freeze specification 187
Antilock Brake System (ABS).... 129
Armrest storage 49
Assistance 193
Assist grips 27
Audio controls..... 82
Automatic transmission 13, 121
- Fluid 152, 187
- Manual mode 122
- Messages..... 69

Auxiliary devices..... 96
Axle loads..... 140, 191

B

Battery 156, 187
- Disconnection..... 156
- Jump starting..... 177
- Replacement..... 156

Bluetooth® phone..... 103
Bonnet 147
Brakes 116, 129
- ABS 129
- ABS warning lamp..... 63
- Brake fluid 155, 187
- Park brake..... 130
- Warnings 67

Bulb replacement..... 158
Bull bars..... 143

C

Capacities, fluid 190
Caravan, towing..... 139
Carbon monoxide, warning..... 135
Car key 16
CD player..... 90
Central locking..... 4, 16
Central locking system 18
Changing a flat tyre 172
Child restraints..... 40
- Anchorage points 43
- Seat belt locking feature..... 41
- Types of restraint..... 40

Child safety locks..... 19
Child safety switch..... 26
Cleaning 182
- Exterior..... 182
- Interior..... 184

Climate control..... 12, 108
Clock..... 86
Clutch 13, 124
Console 47
Coolant
- Capacities 190
- Engine coolant 152

Coolant continued
Message ... 68
Specification ... 187
Temperature gauge ... 58
Cover ... 50
Cruise control ... 133
Cup holders ... 47

D
Dashboard layout ... 9
Demisting windows ... 113
Diesel ... 116, 136
Fuel filter ... 157
Fuel system bleeding ... 157
Differential oil ... 187
Dimensions ... 190
Dimmer, instrument lighting ... 78
Dipping headlamps ... 10, 75
Dipstick
Engine oil ... 151
Display information ... 57
Door ajar light ... 68
Doors ... 19
Child safety locks ... 19
Key ... 16
Doors continued
Locking and unlocking ... 19
Lock snibs ... 19
Rear doors ... 20
Driving ... 115
Parking ... 120
Running-in ... 115
Safety ... 115
Starting the engine ... 119
Driving lamps ... 143
Driving precautions ... 115

E
Electrical system ... 164
Electric mirrors ... 23
Electric seat ... 31
Electric windows ... 25
Electronic Stability Control (ESC) ... 132
Warnings ... 70
Emergencies
Bulb replacement ... 158
Changing a flat tyre ... 172
Customer assistance ... 193
Engine overheating ... 152
Emergencies continued
Flat battery ... 177
Flat tyre ... 172
Fuse replacement ... 164
Towing the vehicle ... 179
Emissions ... 145
Engine
Air filter ... 152
Compartments ... 149
Cooling system ... 152
Number location ... 189
Overheating ... 152
Specifications ... 189
Starting ... 14, 119
Temperature warning ... 68
Warnings ... 68
Engine oil ... 151
Capacities ... 190
Dipstick ... 151
Specification ... 187
Ethanol ... 136
Exhaust fumes, warning ... 135
Exit lighting ... 80
Exterior lighting ... 10, 75
Exterior mirrors ... 7, 23

F
Fan, climate control 109
Flat battery..... 177
Flat tyre
Changing a flat tyre 172
Fluid levels
Automatic transmission 152
Brake..... 155
Coolant..... 152
Engine oil 151
Power steering 153
Windscreen washer fluid 154
Fog lamps..... 77
Four-wheel drive..... 125
Front seats..... 29
Fuel..... 135
Ethanol 136
Fuel cap 137
Fuel types..... 136
Fumes warning..... 135
Gauge 58
Precautions 135
Refuelling 137
Tank capacity 190
Warnings 70
Fuses and relays 164

G
Gas cylinders.....118
Gauges 57
Engine temperature..... 58
Fuel 58
Information displays 57
Odometer 57
Speedometer..... 57
Tachometer 57
Glove box 47

H
Hand brake 130
Hazard warning 11, 76
Headlamps 75
Headlamp range adjustment.... 76
High beam indicator lamp 65
Operation 75
Head restraints 6, 28
Heated rear window..... 27, 109
Heating and ventilation.....108, 111
High beam 10, 65, 75
Horn.....11, 54

I
Identification label..... 188
Identification number 188
Ignition switch/lock.....118
Immobiliser 22
Indicators/warning lamps..... 57
Infant and child restraints 42
Inflation, tyres 169, 192
Information displays..... 57, 66
Infotainment system 81
Bluetooth® phone 103
CD player 90
Clock 86
Controls..... 82
iPod® 97
MP3..... 91
Operation 83
Radio..... 87
Time 86
USB player..... 96
Instrument panel..... 9, 60, 78
Interior lighting..... 78
Interior mirrors 24
iPod®..... 97

J
Jack 172
Storage 169
Jump starting 177

K
Keys
Code number 17
Ignition key 4, 16

L
Lamp messages 70
Lighting 75
Bulb replacement 158
Courtesy lamp 78
Dimmer 78
Driving lamps 143
Entry lighting 79
Exit lighting 80
Exterior 10, 75
Fog lamps 77
Hazard lamps 11, 76
Headlamp range adjustment 76
Headlamps 75
High/low beam 10, 75
Lighting continued
Interior lamps 78
Lamp control 75
Reading lamps 79
Reversing lamps 77
Turn signals 11, 77
Load compartment 49
Loading capacity 191
Loading the vehicle 52
Locks
Bonnet lock 147
Child safety locks 19
Door locks 19
Ignition switch/lock 14
Locking and unlocking 16, 118

M
Maintenance 146
Manual door locks 19
Manual transmission 13, 124
Fluid 187
Messages 69
Mirrors 7, 23
Exterior 23
Interior 24
MP3 91

N
New vehicle running-in 115
Nudge bars 143
Number location (engine) 189

O
Odometer 57
Oil
Checking oil level 151
Differential oil 187
Dipstick 151
Message 68
Overheating 152
Message 68

P
Park brake 130
Park brake warning 63
Parking 15, 120
Personalisation settings 74
Phone 103

Polishing 183
Power mirrors 23
Power outlets 56
Power seat 31
Power steering fluid 153, 187
Power windows 25
Puncture 169
Push/tow start warnings 177

R

Radio 87
Reading lamps 79
Rear seats 32
Rear view mirror 24
Rear window demister 27, 109
Refuelling 137
Relays 164
Remote control 17
Restraints 28
  Child restraints 40
  Infant restraints 42
Retained Accessory Power (RAP) 120
Ride control systems 131
Roo bars 143
Roof rack loads 52
Running-in a new vehicle 115

S

Seat belts 7, 33
  Force limiters 33
  Height adjustment 35
  Locking (child restraints) 41
  Seat belt warning 61
  Tensioners 34
Seats 28
  Adjustment 4, 29
  Child restraints 40
  Front seats 29
  Head restraints 6, 28
  Rear seats 32
Security
  Alarm 21
  Key code 17
Servicing 186
Snorkel intake 144
Snow chains 171
Specifications 187, 189
  Axle loads 191
  Capacities 190
Specifications continued
  Dimensions 190
  Engine 189
  Towing capacity 139
  Tyre pressure 192
Speedometer 57
Stability control 132
  Messages 70
Starting 115
  Flat battery 177
  Normal 14, 119
Steering 8, 53
  Power steering fluid 153, 187
  Tilt 8, 53
Steering wheel controls 53
  Audio 53
  Cruise control 54
Storage compartments 45
Sun visors 27
Supplemental Restraint System (SRS) 37

T
Tachometer 57
Tailgate lock 21
Tank capacity 190
Technical data 188
Telephone 103
Temperature gauge 58
Tilt steering 53
Time 86
Tonneau cover 50
Tools 169
Towing 139, 179
  Another vehicle 181
  Caravan/trailer 139
  Equipment 141
  Loading 139
  Precautions 142
Traction Control System (TCS) 131
Trailer towing 139
Transfer case 126, 187
Transmission
  Automatic 13, 121
  Fluid 187
  Manual 13, 124
Trip computer 72
Turn signals 11, 77
Tyres
  Chains 171
  Changing 172
  Placard 170
  Pressure 169, 192
  Replacement 170
  Rotation 171
  Tread depth 170

U
USB player 96

V
Vanity mirror 27
Vehicle care 145
Vehicle data 189
Vehicle Identification Number (VIN) 188
Vehicle personalisation 74
Vehicle storage 146
Vents 114

W
Warning lights 57
Washing the vehicle 182
Water crossing 117
Wheels and tyres 169
Windows 25
  Safety function 26
Windscreen demister 113
Windscreen washer fluid 154
Wiper blades 183
  Replacement 157
Wipers and washers 12, 54